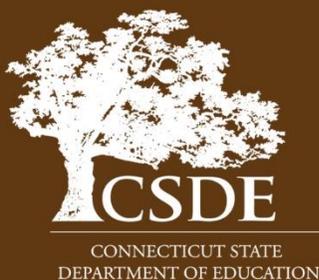


Meeting the Whole Grain-rich Requirement for the National School Lunch Program and School Breakfast Program Meal Patterns for Grades K-12

School Year 2021-22



September 2021

**Connecticut State Department of Education
Bureau of Health/Nutrition, Family Services and Adult Education
450 Columbus Boulevard, Suite 504
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Meeting the Whole Grain-rich Requirement for the NSLP and SBP Meal Patterns for Grades K-12

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/WGRCriteria.pdf>

Project Director

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About this Guide

This guide contains comprehensive information on meeting the USDA’s whole grain-rich (WGR) requirement for schools meals for grades K-12, including:

- crediting and serving size requirements for the grains component;
- the WGR criteria for commercial grain products and grain foods made from scratch;
- the required crediting documentation for WGR foods;
- examples of how to evaluate commercial products and standardized recipes for WGR compliance; and
- how to evaluate the accuracy of a manufacturer’s product formulation statement (PFS) for a commercial grain product.

The information in this guide reflects the USDA’s regulations and policies for the WGR requirement of the National School Lunch Program (NSLP) and School Breakfast Program (SBP) meal patterns for grades K-12. The NSLP and SBP meal patterns also apply to the Seamless Summer Option (SSO) of the NSLP. The WGR requirement does not apply to the Afterschool Snack Program (ASP) meal pattern for grades K-12. For information on the NSLP and SBP meal patterns, visit the CSDE’s [Meal Patterns for Grades K-12 in School Nutrition Programs](#) webpage.

Each section of this guide contains links to other sections when appropriate, and to websites with relevant information and resources. These can be accessed by clicking on the blue text throughout the guide.

The mention of trade names, commercial products, or organizations does not imply approval or endorsement by the CSDE or the USDA.

The contents of this guide are subject to change. The CSDE will update this guide as the USDA issues additional policies and guidance regarding the school meal patterns. Please check the “[Whole Grain-rich Requirement](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage for the most current version. For more information, contact Susan S. Fiore, M.S., R.D., Nutrition Education Coordinator, at susan.fiore@ct.gov or 860-807-2075.

About the NSLP and SBP Meal Patterns

The meal patterns for grades K-12 are defined by the final rule, *Nutrition Standards for the National School Lunch and School Breakfast Programs* (77 FR 4088), as required by the [Healthy, Hunger-Free Kids Act of 2010](#) (Public Law 111-296). The USDA provides additional guidance on the meal pattern requirements through the policy memos available on the USDA’s [FNS Documents & Resources](#) webpage. Links to the USDA’s regulations and final rules for the NSLP and SBP meal patterns are available in the “[Meal Patterns for School Nutrition Programs](#)” section of the CSDE’s [Laws and Regulations for Child Nutrition Programs](#) webpage.

For additional guidance on the grains component of the NSLP and SBP meal patterns, refer to the CSDE’s guide, *Menu Planning Guide for School Meals for Grades K-12*, and visit the “[Grains Component for Grades K-12](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

Meal Pattern Flexibilities for COVID-19

Pursuant to the [COVID-19 Child Nutrition Response Act \(H.R. 6201, Title II\)](#), and the exceptional circumstances of the current COVID-19 public health emergency, the U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS) has established nationwide waivers to support access to nutritious meals, while enforcing recommendations from public health experts with regard to social distancing measures. If a CACFP sponsor has received approval from the Connecticut State Department of Education (CSDE) to implement any of the national waiver provisions, these approvals supersede the applicable requirements in this guide. For more information, visit the CSDE’s [Operation of Child Nutrition Programs during Coronavirus \(COVID-19\) Outbreaks](#) webpage.

Note: Per USDA memo, [COVID–19: Child Nutrition Response #90: Nationwide Waiver to Allow Specific School Meal Pattern Flexibility for School Year 2021-2022](#), SFAs that cannot meet the WGR requirement during school year 2021-22 (through June 30, 2022) must request a waiver from the CSDE. For more information, visit the “[How To](#)” section of the CSDE’s [Operating Child Nutrition Programs during COVID-19 Outbreaks](#) webpage. If the SFA has not applied to and received approval from the CSDE for this waiver, all grains served in school meals during school year 2021-22 must continue to be WGR.

Relevance to Connecticut Nutrition Standards

The WGR criteria for competitive foods under the [Connecticut Nutrition Standards](#) (CNS) are the same as the WGR criteria for school meals. The CNS applies to all foods sold separately from reimbursable meals in public schools that choose the healthy food option of Healthy Food Certification (HFC) under [Section 10-215f](#) of the Connecticut General Statutes.

Grain foods sold separately from school meals in HFC public schools must be WGR, and cannot exceed the CNS limits for calories, fat, saturated fat, trans fat, sodium, and sugars. Commercial products that meet these criteria are listed on the CSDE's [List of Acceptable Foods and Beverages](#) webpage. For more information, visit the CSDE's [HFC](#) and [CNS](#) webpages.

CSDE Contact Information

For questions regarding the NSLP, SBP, and SSO, please contact the school nutrition programs staff in the CSDE’s Bureau of Health/Nutrition, Family Services and Adult Education.

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For information on the Afterschool Snack Program (ASP), Special Milk Program (SMP), Child and Adult Care Food Program (CACFP), Fresh Fruit and Vegetable Program (FFVP), and Summer Food Service Program (SFSP), visit the CSDE’s [Child Nutrition Programs](#) webpage.

Abbreviations and Acronyms

| | |
|--------|--|
| AR | Administrative Review |
| ASP | Afterschool Snack Program of the NSLP |
| CFR | Code of Federal Regulations |
| C.G.S. | Connecticut General Statutes |
| CN | Child Nutrition |
| CNP | Child Nutrition Programs |
| CSDE | Connecticut State Department of Education |
| FBG | <i>Food Buying Guide for Child Nutrition Programs</i> (USDA) |
| FDA | Food and Drug Administration |
| FNS | Food and Nutrition Service, U.S. Department of Agriculture |
| HHFKA | Healthy, Hunger-Free Kids Act of 2010 (Public Law 111-296) |
| ICN | Institute of Child Nutrition |
| LEA | local educational agency |
| NSLP | National School Lunch Program |
| PFS | product formulation statement |
| RCCI | residential child care institution |
| SBP | School Breakfast Program |
| SFA | school food authority |
| SSO | Seamless Summer Option of the NSLP |
| USDA | U.S. Department of Agriculture |
| WGR | whole grain-rich |

1 — Overview of Grain Requirements

The NSLP and SBP meal patterns for grades K-12 require daily and weekly servings of the grains component. All grain products and standardized recipes must be whole grain-rich (WGR). The required quantities for the grains component are in ounce equivalents.

| Table 1-1. Required daily and weekly ounce equivalents of the grains component | | | | | | | | |
|--|--------------------|---------------------|----------------|---------------------|------------------------|---------------------|----------------|---------------------|
| Grades | Lunch ¹ | | | | Breakfast ¹ | | | |
| | Five-day week | | Seven-day week | | Five-day week | | Seven-day week | |
| | Daily | Weekly ² | Daily | Weekly ² | Daily | Weekly ² | Daily | Weekly ² |
| K-5 | 1 | 8-9 | 1 | 11-12.5 | 1 | 7-10 | 1 | 10-14 |
| 6-8 | 1 | 8-10 | 1 | 11-14 | 1 | 8-10 | 1 | 11-14 |
| 9-12 | 2 | 10-12 | 2 | 14-17 | 1 | 9-10 | 1 | 12.5-14 |

¹ All grains must be WGR.
² SFAs cannot offer less than the minimum weekly serving. The maximum weekly serving is not required but provides a guide for planning age-appropriate meals that meet the weekly limits for calories, saturated fats, and sodium. For information on planning school meals to meet the dietary specifications, refer to section 6 of the CSDE’s *Menu Planning Guide for School Meals for Grades K-12*.

All grain menu items must meet the WGR criteria, including commercial grain products, grain foods made on site by the school food authority (SFA), and grain foods prepared by vendors. SFAs must maintain the appropriate documentation to demonstrate that grain products and standardized recipes meet the meal pattern requirements. The CSDE will review this information during the Administrative Review of the school nutrition programs.



Creditable Grains

Creditable grains are the ingredients in a commercial grain product or standardized recipe that count toward the grains component. Creditable grains include whole grains and enriched grains. An overview of the crediting guidance for these grains is summarized below.

Whole grains

Whole grains consist of the entire cereal grain seed or kernel (the starchy endosperm, fiber-rich bran, and nutrient-rich germ) after removing the inedible outer husk or hull. A grain is whole grain if the grain name contains the word “whole,” such as “whole-wheat flour” and “whole-grain corn.”

Whole grains also include some grains that do not contain the word “whole” in the grain name. Examples include berries (e.g., wheat berries), groats (e.g., oat groats), rolled oats and oatmeal (including old-fashioned, quick-cooking, and instant oatmeal), brown rice, brown rice flour, wild rice, quinoa, millet, triticale, teff, amaranth, buckwheat, and sorghum.

In addition, certain whole-wheat products have a Food and Drug Administration (FDA) standard of identity that indicates they are whole grain. The FDA provides standards of identity only for whole-wheat bread, rolls, and buns ([21 CFR 136.180](#)) and whole-wheat macaroni products ([21 CFR 139.138](#)). These products include whole-wheat bread, rolls, and buns; entire wheat bread, rolls, and buns; graham bread, rolls, and buns (does not include graham crackers); and whole-wheat spaghetti, vermicelli, macaroni, and macaroni products. **Note:** Other grain products that are labeled as “whole wheat” but do not have an FDA standard of identity (such as crackers, tortillas, bagels, and biscuits) may or may not be 100 percent whole grain.

Whole grains also include nixtamalized corn ingredients and reconstituted grains. Nixtamalization is the process of soaking and cooked dried corn in an alkaline (slaked lime) solution. This process results in a product with nutrition content similar to whole-grain corn. Nixtamalized corn is used to make hominy (e.g., hominy grits), masa harina (corn flour), corn masa (dough from masa harina), and certain types of cornmeal.



Dried hominy (such as grits) credits as a whole grain. A ½-cup serving of cooked hominy grits or 1 ounce (28 grams) of dry hominy grits credits as 1 ounce equivalent of the grains component.

Reconstituted grains (such as “reconstituted whole-wheat flour”) credit as whole grains when the reconstitution is done by the original milling facility to ensure the same batch of whole grain is returned to its natural proportions. Reconstituted grains are made by blending the crushed and separated products of milling (bran, germ, and endosperm) from the same type of grain in the same proportions originally present in the intact grain kernel. To credit reconstituted grains as the grains component, CACFP facilities must request documentation stating that the milling company recombined the grain components to the natural proportions of bran, germ, and endosperm.

For more information on identifying and crediting whole grains, refer to the CSDE’s resource, [Crediting Whole Grains in the NSLP and SBP](#).

Enriched grains

Enriched grains contain five vitamins and minerals added in amounts required by the Food and Drug Administration (FDA) to replace some of the nutrients lost during processing. The enrichment nutrients include thiamin (vitamin B₁, thiamin mononitrate, or thiamin hydrochloride); riboflavin (vitamin B₂); niacin (vitamin B₃ or niacinamide); folic acid (folate); and iron (reduced iron, ferrous sulfate, or ferric orthophosphate). For guidance on identifying and crediting enriched grains, refer to the CSDE’s resource, [Crediting Enriched Grains in the NSLP and SBP](#).

Serving Size

Creditable grain products and foods made from scratch must provide the minimum quantities required by the NSLP and SBP meal patterns. The amount of a creditable or WGR grain food that provides 1 ounce equivalent varies because different types of foods contain different amounts of creditable grains. For example, to credit as 1 ounce equivalent of the grains component, a WGR roll must weigh 28 grams (1 ounce), a WGR corn muffin must weigh 34 grams (1.2 ounces), and a WGR blueberry muffin must weigh 55 grams (2 ounces). The minimum amount that credits toward the grains component is ¼ ounce equivalent.

The USDA allows two methods for determining the ounce equivalents of a creditable grain product or standardized recipe. SFAs may use either method but must document how the crediting information was obtained. These methods are summarized below.

For detailed guidance on both methods, refer to the CSDE’s resource, [Calculation Methods for Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP](#). For more information on ounce equivalents, visit the “[Ounce Equivalents \(Serving Size for Grains\)](#)” section of the CSDE’s Crediting Foods in School Nutrition Programs webpage.



Method 1: USDA’s Exhibit A chart

Method 1 uses the USDA’s chart, [Exhibit A: Grain Requirements for Child Nutrition Programs](#) (Exhibit A) to determine the required weight (groups A-G) or volume (groups H-I) for the grain group where the product belongs. The required amounts for the grains component are not the same for all Child Nutrition Programs. The CSDE’s resource, [Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP](#), lists the Exhibit A grain ounce equivalents that apply to the NSLP and SBP meal patterns.

This method is used for commercial grain products and may also be used for standardized recipes if the SFA knows the weight (grams or ounces) of the prepared (cooked) serving. Some commercial grain products must use method 2 (refer to “[When a PFS is required](#)” in this document).

Method 2: creditable grains

Method 2 determines the ounce equivalents for creditable grain products and standardized recipes by calculating the total weight (grams) of creditable grains per serving. The grams of creditable grains are listed in the commercial product’s PFS or calculated from the grain quantities in the SFA’s standardized recipe. To credit as 1 ounce equivalent of WGR grains:

- foods in groups A-E of the USDA’s Exhibit A chart must contain **16 grams** of creditable grains (including at least **8 grams** of whole grains); and
- foods in groups H-I must contain **28 grams** of creditable grains (including at least **14 grams** of whole grains).



This method is used for standardized recipes and may also be used for commercial grain products that have a PFS stating the weight of creditable grains per serving (refer to “[When a PFS is required](#)” in this document).

Grain crediting tools

The tools below help menu planners determine the ounce equivalents contribution of creditable grain products and standardized recipes.

- **USDA’s Exhibit A Grains Tool for commercial grain products:** This [online tool](#) of the USDA’s [Food Buying Guide for Child Nutrition Programs](#) (FBG) determines the ounce equivalents of commercial grain products. For more information, watch the USDA’s webinars, [Exhibit A Grains Tool to the Rescue](#) and [How to Maximize the Exhibit A Grains Tool](#).
- **USDA’s Recipe Analysis Workbook:** The FBG’s online [Recipe Analysis Workbook](#) allows menu planners to search for ingredients, develop a standardized recipe, and determine the recipe’s meal pattern contribution per serving. To access this tool, users must create a free account on the USDA’s FBG website.

2 — WGR Criteria for Commercial Products

The WGR criteria are different for commercial grain products (such as bread, rice, pasta, and breakfast cereals) and commercial combination foods that contain a grain portion (such as pizza crust in pizza, noodles in lasagna, tortilla shells in burritos, and breading on chicken nuggets). These criteria are summarized below.

Groups A-I refer to the grain groups in the USDA’s Exhibit A chart. For more information, refer to “[Serving Size](#)” in section 1.

- Commercial grain foods (groups A-H):** Grain products in groups A-G (such as breads, muffins, pancakes, and crackers) and group H (such as rice, pasta, quinoa, and cooked breakfast cereals, e.g., oatmeal) are WGR if they meet the following three criteria: 1) the first ingredient (excluding water) is a whole grain; 2) any other creditable grains are enriched; and 3) the combined weight of any noncreditable grains does not exceed the specified limit. [Table 2-1](#) summarizes the WGR criteria for commercial grain products in groups A-H.
- RTE breakfast cereals (group I):** RTE breakfast cereals are WGR if they meet the following two criteria: 1) a whole grain is the first ingredient; and 2) the cereal is fortified. Fortification is not required for 100 whole grain cereals. The limit for noncreditable grains does not apply to fortified WGR RTE breakfast cereals. [Table 2-2](#) summarizes the WGR criteria for RTE breakfast cereals.
- Commercial combination foods containing a grain portion from groups A-I:** The grain portion (such as pizza crust in pizza, noodles in lasagna, and breading on chicken nuggets) is WGR if it meets the following three criteria: 1) a whole grain is the first **grain** ingredient (or the first ingredient in the grain portion if it is listed separately); 2) any other creditable grains in the grain portion are enriched; and 3) the combined weight of any noncreditable grains in the grain portion does not exceed the specified limit. [Table 2-3](#) summarizes the WGR criteria for commercial combination foods that contain a grain portion from groups A-I.

Menu planners must determine if commercial foods meet the WGR criteria by reviewing the product’s ingredients statement and packaging, and obtaining a PFS if necessary. For more information on the required WGR documentation, refer to [section 4](#).

If the product meets the WGR criteria, the menu planner must determine the meal pattern contribution (ounce equivalents) based on the appropriate grain group in the USDA’s Exhibit A chart or the creditable grains per serving. For information, refer to “[Serving Size](#)” in section 1.

Table 2-1. WGR criteria for commercial grain products in groups A-H

These three WGR criteria apply to commercial grain products in groups A-G (such as breads, muffins, pancakes, and crackers) and group H (such as rice, pasta, quinoa, and cooked breakfast cereals, e.g., oatmeal). A product must meet all three criteria to be WGR.

WGR criterion 1: The product must contain at least 50 percent whole grains by weight. SFAs may use any of the three methods below to determine if a product meets this criterion.

- **Method 1:** The ingredients statement lists a whole grain as the first ingredient (or water is the first ingredient and a whole grain is the second ingredient); or the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. **Note:** Products that list a whole grain first in a flour blend of whole and enriched flour, such as “*flour blend (whole-wheat flour, enriched flour)*,” require a PFS to determine crediting information. For more information, refer to “[Commercial products with flour blends](#)” in this section.
- **Method 2:** The product packaging or manufacturer’s PFS indicates that the serving contains the minimum grain content for 1 ounce equivalent. Groups A-G (baked goods) must contain at least 8 grams of whole grains per ounce equivalent. Group H (cereal grains) must contain at least ¼ cup cooked or 14 grams dry of whole grains per ounce equivalent (½ cup).
- **Method 3:** The product packaging includes one of the Food and Drug Administration’s (FDA) approved whole grain health claims. For more information, refer to “[Method 3: Whole Grain Health Claim](#)” in this section.

For more information, refer to “[WGR Criterion 1 – At Least 50 Percent Whole Grains](#)” in this section.

WGR criterion 2: Any other creditable grains in the product must be enriched. For more information, refer to “[WGR Criterion 2 – All Other Creditable Grains are Enriched](#)” in this section.

WGR criterion 3: Any noncreditable grains must be less than 2 percent (¼ ounce equivalent) of the product formula. To comply with this limit, the combined total of all noncreditable grains cannot exceed 3.99 grams per ounce equivalent for groups A-G or 6.99 grams per ounce equivalent for group H. If noncreditable grains exceed these amounts, the product is noncreditable, even if it meets WGR criteria 1 and 2. For more information, refer to “[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)” in this section.

Table 2-2. WGR criteria for RTE breakfast cereals in group I

These two WGR criteria apply to RTE breakfast cereals in group I, such as puffed cereals, flaked or round cereals, and granola. A product must meet both criteria to be WGR. **Note:** The limit for noncreditable grains does not apply to fortified RTE breakfast cereals that contain a whole grain as the first ingredient.

WGR criterion 1: The product must contain at least 50 percent whole grains by weight. SFAs may use any of the three methods below to determine if a product meets this criterion.

- **Method 1:** The ingredients statement lists a whole grain as the first ingredient, or the product's PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight.
- **Method 2:** The product packaging or manufacturer's documentation indicates that the product contains the required weight (1 ounce) or volume (1 cup of flaked or round cereal, 1¼ cups of puffed cereal, and ¼ cup of granola) for 1 ounce equivalent, and a whole grain is the greatest ingredient by weight.
- **Method 3:** The product packaging includes one of the FDA's approved whole grain health claims. For more information, refer to "[Method 3: Whole Grain Health Claim](#)" in this section.

For more information, refer to "[WGR Criterion 1 – At Least 50 Percent Whole Grains](#)" in this section.

WGR criterion 2: The product must be fortified unless it is 100 percent whole grain. A breakfast cereal is fortified if the food is labeled as "fortified" or the ingredients statement lists the vitamins and minerals that have been added to the product. Fortified breakfast cereals typically contain the five enrichment nutrients (iron, thiamin, riboflavin, niacin, and folic acid) plus other vitamins and minerals that do not exist naturally in grains. For example, the RTE cereal below is fortified with 11 vitamins and minerals, listed after "Vitamins and Minerals."

- Ingredients: *Whole-grain wheat*, raisins, wheat bran, sugar, brown sugar syrup, contains 2% or less of salt, malt flavor. **Vitamins and Minerals:** *Potassium chloride, niacinamide, reduced iron, vitamin B6 (pyridoxine hydrochloride), zinc oxide, vitamin B2 (riboflavin), vitamin B1 (thiamin hydrochloride), vitamin A palmitate, folic acid, vitamin D, vitamin B12.*

For more information, refer to the CSDE's resource, [Crediting Breakfast Cereals for Grades K-12 in the NSLP and SBP](#).

Table 2-3. WGR criteria for commercial combination foods with a grain portion

These three WGR criteria apply to commercial combination foods that contain a grain portion from groups A-I. Examples include pizza crust in pizza, noodles in lasagna, and breading on chicken nuggets. A product must meet all three criteria to be WGR.

WGR criterion 1: The **grain portion** of the product must contain at least 50 percent whole grains by weight. SFAs may use any of the three methods below to determine if a product meets this criterion.

- **Method 1:** The product’s ingredients statement indicates that a whole grain is the greatest ingredient by weight in the **grain portion**; or the PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight in the **grain portion**. If the product lists the grain ingredients as a separate grain portion, a whole grain must be the first ingredient in the grain portion (or water is the first ingredient and a whole grain is the second ingredient). If the product lists the grain ingredients together with all other ingredients, a whole grain must be the first **grain** ingredient.
- **Method 2:** The product packaging or PFS indicates that the **grain portion** of the product contains the minimum grain content for 1 ounce equivalent.
 - Groups A-G (baked goods) must contain at least 8 grams of whole grains per ounce equivalent.
 - Group H (cereal grains) must contain at least ¼ cup cooked or 14 grams dry of whole grains per ounce equivalent (½ cup).
 - Group I (RTE breakfast cereals) must contain the required weight or volume for 1 ounce equivalent, and must list a whole grain as the first ingredient and be fortified. Fortification is not required for 100 whole-grain cereals.
- **Method 3:** The product packaging includes one of the FDA’s approved whole grain health claims. For more information, refer to “[Method 3: Whole Grain Health Claim](#)” in this section.

For more information, refer to “[WGR Criterion 1 – At Least 50 Percent Whole Grains](#)” in this section.

Continued on next page

Table 2-3. WGR criteria for commercial combination foods with a grain portion, *continued*

WGR criterion 2: Any other creditable grains in the **grain portion** of the product must be enriched. For more information, refer to “[WGR Criterion 2 – All Other Creditable Grains are Enriched](#)” in this section.

WGR criterion 3: Any noncreditable grains in the **grain portion** must be less than 2 percent ($\frac{1}{4}$ ounce equivalent) of the product formula. To comply with this limit, the combined total of all noncreditable grains cannot exceed 3.99 grams per ounce equivalent for groups A-G or 6.99 grams per ounce equivalent for groups H-I. If noncreditable grains exceed these amounts, the product is noncreditable, even if it meets WGR criteria 1 and 2. For more information, refer to “[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)” in this section.

WGR Criterion 1: At Least 50 Percent Whole Grains

The USDA allows three methods for determining if a commercial grain product contains at least 50 percent whole grains by weight. SFAs may use any of these methods to determine if a product meets WGR criterion 1.

- **Method 1:** A whole grain is the first ingredient (or water is the first ingredient and a whole grain is the second ingredient); or the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight.
- **Method 2:** The product contains the minimum grain content for 1 ounce equivalent, as required for the appropriate grain group (A-I) in the USDA’s Exhibit A chart.
 - Groups A-G must contain at least 8 grams of whole grains per ounce equivalent.
 - Group H must contain at least $\frac{1}{4}$ cup cooked or 14 grams dry of whole grains per ounce equivalent ($\frac{1}{2}$ cup).
 - Group I must list a whole grain as the first ingredient and be fortified. Fortification is not required for 100 whole grain cereals.
- **Method 3:** The product’s packaging contains the FDA’s whole grain health claim.

If a product meets WGR criterion 1, the SFA must also determine if it meets WGR criteria 2 and 3. For more information, refer to “[WGR Criterion 2 – All Other Creditable Grains are Enriched](#)” and “[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)” in this section.

Method 1: Whole grain is first ingredient

A commercial grain product contains at least 50 percent whole grains if A whole grain is the first ingredient (or water is the first ingredient and a whole grain is the second ingredient). For guidance on identifying whole grains, refer to the CSDE’s resource, [Crediting Whole Grains in the NSLP and SBP](#).

The method for determining if a whole grain is the first ingredient is different for commercial grain products (such as breads, rice, and pasta) and commercial combination foods that contain a grain portion. These methods are summarized below.

- **Commercial grain products in groups A-H:** A commercial grain product in A-G (such as breads, muffins, pancakes, and crackers) and group H (such as rice, pasta, quinoa, and cooked breakfast cereals, e.g., oatmeal) contains at least 50 percent whole grains if A whole grain is the first ingredient (or water is the first ingredient and a whole grain is the second ingredient). The ingredients statements below show some examples of 100 percent whole-grain commercial products.

- Ingredients: *Whole-wheat flour*, sugar, wheat gluten. Contains 2% or less of each of the following: honey, salt, yellow corn flour, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes.

This product contains a whole grain (whole-wheat flour) as the first and only grain ingredient.

- Ingredients: Water, *whole-wheat flour*, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), yeast, wheat gluten, contains less than 2% of each of the following: soybean oil, sugar, salt, calcium propionate (preservative), fumaric acid, baking soda, monocalcium phosphate, calcium sulfate, ammonium sulfate.

This product contains a whole grain (whole-wheat flour) as the first ingredient after water.



- **Commercial combination foods containing a grain portion from groups A-H:** The WGR criteria apply only to the grain portion of combination foods, such as pizza crust in pizza, noodles in lasagna, and breading on chicken nuggets. The WGR criteria depend on whether the ingredients statement lists the grain ingredients as a separate grain portion or together with all other non-grain ingredients.
 - **Grain portion listed separately:** If the ingredients statement lists the grain ingredients as a separate grain portion, the combination food contains at least 50 percent whole grains if a whole grain is the first ingredient in the *grain portion*. For example, the ingredients statement for the chicken nuggets product below lists white whole-wheat flour as the first ingredient in the breading (grain portion).

Ingredients: Chicken, water, salt, and natural flavor. **Breaded with:** *white whole-wheat flour*, water, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid), salt, contains 2% or less of the following: yellow corn flour, cornstarch, dried onion, dried garlic, dried yeast, brown sugar, extractives of paprika, and spices. Breading set in vegetable oil.

- **Grain ingredients listed with non-grain ingredients:** If the ingredients statement lists the grain ingredients together with all other ingredients, the combination food contains at least 50 percent whole grains if a whole grain is the first *grain* ingredient. For example, the ingredients statement for the chicken nuggets product below lists whole-wheat flour as the first and only grain ingredient.

Ingredients: Boneless, skinless chicken breast with rib meat, water, *whole-wheat flour*, contains 2% or less of the following: dried garlic, dried onion, salt, sea salt, soybean oil, spice, sugar, torula yeast, turmeric, yeast extract. Breading set in vegetable oil.



Method 2: Minimum grain content

A commercial grain product contains at least 50 percent whole grains if the product's packaging or manufacturer's documentation indicates that the product contains the minimum grain content for 1 ounce equivalent for the appropriate grain group (A-I) in the USDA's Exhibit A chart (refer to "Serving Size" in section 1). These amounts are summarized below.

- Groups A-G (baked goods) must contain at least 8 grams of whole grains per ounce equivalent.
- Group H (cereal grains) must contain at least $\frac{1}{4}$ cup cooked or 14 grams dry of whole grains per ounce equivalent ($\frac{1}{2}$ cup).
- Group I (RTE breakfast cereals) must contain the required weight (1 ounce) or volume (1 cup of flaked or round cereal, $1\frac{1}{4}$ cups of puffed cereal, and $\frac{1}{4}$ cup of granola) for 1 ounce equivalent, and must list a whole grain as the first ingredient and be fortified. Fortification is not required for 100 whole grain cereals.

This information is not commonly listed on product packaging. SFAs may need to obtain a PFS to document that a commercial product contains at least 50 percent whole grains. For more information on the required WGR documentation, refer to [section 4](#).

Method 3: Whole grain health claim

A commercial grain product contains at least 50 percent whole grains if the product packaging includes one of the FDA's two approved whole grain health claims. These claims are not commonly found on most grain products.

- **Low-fat claim:** "Diets rich in whole grain foods and other plant foods and low in total fat, saturated fat, and cholesterol, may reduce the risk of heart disease and some cancers."
- **Moderate-fat claim:** "Diets rich in whole grain foods and other plant foods, and low in saturated fat and cholesterol, may help reduce the risk of heart disease."

The health claim on the package label must be identical to one of these statements. For consistency with the *Dietary Guidelines for Americans*, the USDA recommends choosing grain products with the FDA's low-fat health claim.

WGR Criterion 2 – All Other Creditable Grains are Enriched

A commercial grain product meets WGR criterion 2 if all creditable grains (other than whole grains) are enriched. A grain is enriched if it contains the term “enriched” e.g., “enriched flour,” or lists the five enrichment nutrients after the grain ingredient. For example, the bread product below contains an enriched grain as the second ingredient.

- Ingredients: Whole-wheat flour, *unbleached enriched wheat flour (niacin, iron, thiamin mononitrate, riboflavin, folic acid)*, water, canola oil, all natural molasses, salt, baking soda.

For guidance on identifying enriched grains, refer to the CSDE’s resource, [Crediting Enriched Grains in the NSLP and SBP](#). For guidance on identifying enriched RTE and cooked breakfast cereals, refer to the CSDE’s resource, [Crediting Breakfast Cereals for Grades K-12 in the NSLP and SBP](#).

WGR Criterion 3 – Noncreditable Grains Meet Limit

A commercial grain product meets WGR criterion 3 if the combined weight of all noncreditable grains is less than 2 percent ($\frac{1}{4}$ ounce equivalent) of the product formula. A commercial combination food meets WGR criterion 3 if the *grain portion* of the product complies with this limit. For all grain products, the combined weight of noncreditable grains cannot exceed:

- 3.99 grams per ounce equivalent for grain foods in groups A-G of the USDA’s Exhibit A chart; or
- 6.99 grams per ounce equivalent for grain foods in groups H-I of the USDA’s Exhibit A chart.

If the combined weight of noncreditable grains exceeds the limit for the applicable Exhibit A grain group, the product cannot credit as the grains component, even if it meets WGR criteria 1 and 2.

Table 2-4 lists examples of noncreditable grain ingredients commonly found in commercial products. The ingredients in column 1 must be included when determining the total weight of a product’s noncreditable grain ingredients. The ingredients in column 2 do not count toward the limit for noncreditable grains; they can be ignored.

Table 2-4. Examples of noncreditable grain ingredients ¹

| Column 1: Count toward limit ² | Column 2: Do not count toward limit ³ |
|---|--|
| <p>Bran, e.g., corn bran, wheat bran, and oat bran</p> <p>Corn (not whole grain, enriched, or nixtamalized ⁴), e.g., cornmeal, corn flour, degermed corn, stone-ground corn, and yellow corn flour</p> <p>Fiber, e.g., corn fiber, soluble corn fiber, oat fiber, oat hull fiber, and soy fiber</p> <p>Flour (not whole grain or enriched), e.g., durum flour, malted barley flour, fermented wheat flour, rice flour, semolina flour, stone-ground corn flour, white flour, and wheat flour</p> <p>Germ, e.g., wheat germ</p> <p>Grits (not whole grain, enriched, or nixtamalized ⁴), e.g., corn grits, durum grits, and barley grits</p> <p>Modified food starch, e.g., modified cornstarch, modified rice starch, modified tapioca starch, and modified wheat starch</p> <p>Rice, white (not enriched)</p> <p>Vegetable and legume flours, e.g., chickpea flour, fava bean flour, pea flour, potato flour, and soy flour</p> <p>Soy products, e.g., soy flakes and soy grits</p> <p>Starch, e.g., cornstarch, cultured wheat starch, hydrolyzed starch, potato starch, rice starch, and tapioca starch</p> | <p>Cellulose fiber</p> <p>Chicory extract</p> <p>Chicory root</p> <p>Citrus fiber</p> <p>Corn dextrin</p> <p>Fibersol</p> <p>Inulin</p> <p>Malt</p> <p>Malt powder</p> <p>Maltodextrin</p> <p>Pea fiber</p> <p>Powdered cellulose</p> <p>Short chain fructan (fiber)</p> <p>Vital wheat gluten</p> <p>Wheat gluten</p> |

¹ This list is not all-inclusive.

² These ingredients must be included in the total weight of noncreditable grain ingredients. Noncreditable grains cannot exceed 3.99 grams per ounce equivalent for groups A-G or 6.99 grams per ounce equivalent for groups H-I. The limit for noncreditable grains does not apply to WGR fortified RTE breakfast cereals.

³ These ingredients do not count toward the limit for noncreditable grains.

⁴ Corn flour, corn grits, and cornmeal are noncreditable grains unless they are whole grain, enriched, or nixtamalized. Nixtamalized corn ingredients credit as whole grains. Nixtamalization is the process of soaking and cooked dried corn in an alkaline (slaked lime) solution. A PFS may be required to determine if a corn ingredient is nixtamalized. For more information, refer to the CSDE’s resource, [Crediting Whole Grains in the NSLP and SBP](#).

“Contains 2% or less”

Sometimes a commercial product’s ingredients statement lists noncreditable grains after the statement, “contains 2% or less.” If any of three situations below apply, the SFA must obtain a PFS to document the combined weight (grams) of the product’s noncreditable grains. For more information on PFS forms, refer to [section 4](#).

1. **Before statement:** A PFS is required if the ingredients statement lists one or more noncreditable grains **before** the statement, “contains 2% or less.” For example, the ingredients statement below lists one noncreditable grain (soy flakes) before this statement.
 - Ingredients: Water, whole-wheat flour, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzyme, folic acid), brown sugar, corn oil, nonfat dry milk, yeast, cinnamon, *soy flakes*, salt, wheat gluten and **2% or less of each of the following:** sodium benzoate (to protect flavor), corn syrup solids, potassium sorbate, icing stabilizer (calcium carbonate, sugar, agar, salt, mono and diglycerides, sorbitan monostearate), vanilla flavor [propylene glycol, water, sodium benzoate (as a preservative)].

2. **After statement:** A PFS is required if the ingredients statement lists more than one noncreditable grain **after** the statement, “contains 2% or less.” For example, the ingredients statement below lists three noncreditable grains (oat fiber, modified food starch, and wheat starch) after this statement.
 - Ingredients: Whole-wheat flour, sugar, eggs, water, blueberries, enriched flour (flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), invert sugar, soybean oil, **contains 2% or less of:** palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, *oat fiber*, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, *modified food starch*, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, *wheat starch*, blackberry juice concentrate, blueberry juice concentrate, malic acid, enzymes.

3. **Without statement:** A PFS is required if the ingredients statement lists one or more noncreditable grains **without** the statement, “contains 2% or less.” For example, the ingredients statement below lists four noncreditable grains (yellow corn flour, modified cornstarch, yellow corn flour, and soy flour).
- Ingredients: Whole-wheat bread (whole-wheat flour, water, enriched wheat flour [flour, malted barley flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid], sugar, wheat gluten, yeast, salt, soybean oil, mono and diglycerides, calcium propionate (preservative), datem, calcium sulfate, citric acid, soy lecithin, grain vinegar, potassium iodate), water, whole-wheat batter (whole-wheat flour, sugar, enriched bleached wheat flour [enriched with niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid], dextrose, eggs, *yellow corn flour*, corn syrup solids, natural flavor, *modified cornstarch*, salt, leavening (sodium aluminum phosphate, sodium bicarbonate), nonfat milk, spice, artificial flavor, modified cellulose gum, spice extractive), coating (bleached enriched wheat flour [wheat flour, niacin, iron, thiamine mononitrate, riboflavin, folic acid], *yellow corn flour*, sugar, *soy flour*, salt, dextrose, leavening [sodium bicarbonate, monocalcium phosphate], yeast), soybean oil, cinnamon sugar (sugar, spices, natural flavor, silicon dioxide [added to prevent caking]).



When to ignore noncreditable grains

There are some situations when noncreditable grains do not count toward the limit for noncreditable grains. Menu planners can ignore noncreditable grains when any of the situations below apply.

1. **The ingredients statement lists only one noncreditable grain after the statement, “contains 2% or less,” and does not list any other noncreditable grains.** The ingredients statement below shows an example.

- Ingredients: Whole-wheat flour, sugar, wheat gluten. **Contains 2% or less of each of the following:** honey, salt, *yellow corn flour*, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes.

The yellow corn flour in this product is a noncreditable grain because it is not whole grain, enriched, or nixtamalized. However, it does not count toward the limit for noncreditable grains because it is the only noncreditable grain listed after the statement, “contains 2% or less.”

2. **The noncreditable grain is part of a non-grain ingredient.** The limit for noncreditable grains does not apply to non-grain ingredients in commercial grain products. Examples include pastries that contain jam filling made with modified food starch; bagels that contain molasses powder made with wheat starch; and bread that contains a dough conditioner made with soy flakes.



The menu planner can determine if noncreditable grains are part of a non-grain ingredient by reviewing the product’s ingredients statement. When a product contains an ingredient that contains two or more ingredients itself (such as apple filling in a breakfast bun), these sub ingredients are listed after the name of the ingredient, or in parentheses or brackets after the name of the ingredient.

The examples below show some sub ingredients that contain noncreditable grains.

- **Filling:** Corn syrup, *modified food starch*, evaporated apples, cinnamon, lemon juice, locust bean gum, erythorbic acid and potassium sorbate [used as preservatives].
- **Marshmallows** (sugar, dextrose, *modified cornstarch*, corn syrup, cocoa, gelatin, natural and artificial flavor).
- **Molasses powder** (molasses, *wheat starch*).
- **Dough conditioner** (soybean oil, vegetable glycerides, *soy flakes*).
- **Seasoning** [sugar, salt, sea salt, dextrose, spices, yeast extract, natural flavor, maltodextrin, canola oil (as a processing aid), *modified cornstarch*].

3. **The noncreditable grain is part of a WGR fortified RTE breakfast cereal.** The limit for noncreditable grains does not apply to fortified RTE breakfast cereals that contain a whole grain as the first ingredient. For more information, refer to the CSDE’s resource, *Crediting Breakfast Cereals for Grades K-12 in the NSLP and SBP*.



4. **The noncreditable grain is part of a WGR fortified RTE breakfast cereal that is an ingredient in a cereal bar.** The limit for noncreditable grains does not apply to RTE fortified breakfast cereals that contain a whole grain as the first ingredient. However, it applies to the combined weight of any other noncreditable grains in the grain portion of the cereal bar. The ingredients statement below shows an example. This product contains a WGR fortified RTE breakfast cereal (highlighted in blue) as the second ingredient and a non-grain ingredient, marshmallows (highlighted in yellow), as the third ingredient.

- Ingredients: **WHOLE-GRAIN OATS**, Cereal (**WHOLE-GRAIN WHEAT**, sugar, **cornmeal**, brown sugar syrup, canola oil, dextrose, baking soda, salt, calcium carbonate, trisodium phosphate, zinc and iron [mineral nutrients], vitamin C, niacinamide, vitamin B6 [pyridoxine hydrochloride], vitamin B2 [riboflavin], vitamin B1 [thiamin mononitrate], vitamin A [palmitate], folic acid, vitamin B12, vitamin D, BHT added to retain freshness), sugar, canola oil, fructose, **BROWN RICE FLOUR**), marshmallows (sugar, dextrose, **modified cornstarch**, corn syrup, cocoa, gelatin, natural and artificial flavor), chicory root extract, maltodextrin. Contains 2% or less of: **WHOLE-CORN FLOUR**, glycerin, **WHOLE-GRAIN OAT FLOUR**, **wheat starch**, **modified wheat starch**, salt, gelatin, natural flavor.

The cornmeal (noncreditable grain) in the cereal does not count toward the limit for noncreditable grains because fortified whole-grain breakfast cereals are exempt from the limit. The modified cornstarch (noncreditable grain) in the marshmallows does not count toward the limit for noncreditable grains because marshmallows are a non-grain ingredient. However, the cereal bar contains two noncreditable grains (wheat starch and modified wheat starch) listed **outside** of the cereal ingredients, after the statement, “contains 2% or less.” The SFA must obtain a PFS from the manufacturer to document that the combined weight of these two noncreditable grains does not exceed the limit (3.99 grams per ounce equivalent).

Cereal bars are grain-based desserts. Grain-based desserts cannot exceed 2 ounce equivalents per week at lunch. For more information, refer to section 3 of the CSDE’s guide, *Menu Planning Guide for School Meals for Grades K-12*.

5. **The noncreditable grain is part of the non-grain portion of a commercial combination food.** The limit for noncreditable grains does not apply to the non-grain portion (such as meat/meat alternates, vegetables, and fruits) of a combination food. Examples include modified food starch in the chicken portion of breaded chicken; wheat flour in the cheese filling of ravioli; and soy flour and cornstarch in the vegetable filling of an egg roll. The ingredients statement for cheese ravioli below shows an example.

- Ingredients: **Filling:** Fat-free ricotta cheese (whey, skim milk [made from nonfat dry milk powder], vinegar, xanthan gum, carrageenan), egg, low moisture part skim mozzarella cheese (cultured part skim milk, salt, enzymes), whey protein isolate, sodium caseinate, Romano cheese made from cow's milk (cultured milk, salt, enzymes), **bleached wheat flour**, garlic salt (salt, dehydrated garlic), salt, **modified cornstarch**, sugar, dehydrated garlic.
- Pasta:** Whole-wheat flour, enriched durum wheat flour (wheat flour, niacin, ferrous sulfate, thiamin mononitrate, riboflavin, folic acid), water, egg



The two noncreditable grains (bleached wheat flour and modified cornstarch) in the non-grain portion (cheese filling) do not count toward the noncreditable grains limit. For more information, refer to [product 11](#) in the “[Evaluating Commercial Products for WGR Compliance](#)” section of this document.



4 — WGR Documentation

SFAs must be able to document the meal pattern contribution of all commercial grain products and standardized recipes served in reimbursable meals. Menu planners should use the USDA’s *Food Buying Guide for Child Nutrition Programs* (FBG) to determine food yields and crediting information for grain menu items.

Documentation for Commercial WGR Products

The USDA allows two types of documentation for commercial processed foods, including CN labels and PFS forms.

CN labels

CN labels clearly identify the meal pattern contribution of commercial products, based on the USDA’s evaluation of the product’s formulation. Acceptable documentation includes the original CN label from the product carton or a photocopy or photograph of the CN label shown attached to the original product carton.

Grain products (such as breads, muffins, pancakes, crackers, and breakfast cereals) are not eligible for CN labels. CN labels are available only for main dish entrees that contribute to the meat/meat alternates component, such as pizza, breaded chicken nuggets, and cheese ravioli. However, CN labeled foods usually indicate the contribution of grains, vegetables, and fruits that are part of these products. For more information, refer to the CSDE’s resource, *Child Nutrition (CN) Labeling Program*.

PFS forms

A PFS is a document developed by manufacturers that provides specific information about how a product credits toward the USDA meal patterns for Child Nutrition Programs. The information on PFS forms can vary among manufacturers because these forms are not monitored by the USDA.

To document that a product is WGR, the PFS must indicate the weight (grams) of each creditable grain per serving and demonstrate that whole grains are the greatest ingredient by weight. For more information on PFS forms, refer to the CSDE’s resources, *Product Formulation Statements* and *Accepting Processed Product Documentation in the NSLP and SBP*, and the USDA’s resources, *Product Formulation Statement for Documenting Grains in Child Nutrition Programs* and *Tips for Evaluating a Manufacturer’s Product Formulation Statement*.

When a PFS Is Required for Commercial Grain Products

SFAs may need to obtain additional information to determine the crediting information for some commercial products. A PFS is required for commercial products when any of the following situations apply:

- a whole grain is not the first ingredient, but the product contains more than one whole grain;
- the first ingredient is a flour blend of whole and enriched flour;
- a combination food that contains a WGR grain portion is not CN labeled;
- the manufacturer claims that the product's serving size is less than the required weight or volume in the USDA's Exhibit A chart; or
- the product is not listed in the USDA's Exhibit A chart.

These situations are described below. For each situation, the manufacturer's PFS must indicate the weight (grams) of each creditable grain per serving and demonstrate how the product provides that amount according to the USDA's *Food Buying Guide for Child Nutrition Programs* or the USDA's regulations, guidance, or policies. If the manufacturer will not supply a PFS, or the PFS does not provide the appropriate documentation, the product cannot credit as the grains component in the NSLP and SBP.

SFAs should verify the accuracy of the PFS **before** including the product in reimbursable meals and snacks, and must maintain all crediting documentation on file. The CSDE will review this information during the Administrative Review of the school nutrition programs. For more information, refer to the USDA's document, *Tips for Evaluating a Manufacturer's Product Formulation Statement*. For guidance on how to evaluate a PFS, refer to [section 6](#).

Situation 1: Whole grain is not the first ingredient, but the product contains more than one whole grain

A PFS is required when a whole grain is not the first ingredient (excluding water), but the ingredients statement for the commercial grain product (or the *grain portion* of a combination food) contains more than one whole grain. For grain products (such as breads, rolls, muffins, and waffles), the PFS must document that the combined weight of all whole grains is the greatest ingredient by weight. For combination foods (such as pizza, lasagna, and breaded chicken), the PFS must document that the combined weight of all whole grains in the *grain portion* is the greatest ingredient by weight in the *grain portion*.

Table 4-1 shows some examples of acceptable WGR documentation for commercial foods that contain multiple whole grains.

Table 4-1. Examples of acceptable documentation for commercial products that contain multiple whole grains

Bread product

Ingredients: *Unbleached enriched wheat flour [flour, malted barley flour, reduced iron, niacin, thiamin mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid]*, water, *whole-wheat flour, whole oats*, sugar, yeast, soybean oil, salt.

The first ingredient in the bread (unbleached enriched wheat flour) is not a whole grain. However, the product contains two whole grains (whole-wheat flour and whole oats).

The SFA obtains a PFS from the manufacturer stating that enriched flour is 40 percent of the product's grain weight, whole-wheat flour is 30 percent, and whole oats is 30 percent. This product meets the WGR criteria because the PFS documents that the combined weight of the two whole-grain ingredients (60 percent) is greater than the weight of the enriched flour (40 percent), even though enriched flour is listed first in the ingredients statement.

Breaded chicken patty with package stating “contains whole grains”

Ingredients: Chicken, water, salt and natural flavor. **Breaded with:** *enriched wheat flour*, water, *white whole-wheat flour*, salt, *whole-grain corn flour*, corn starch, dried onion, dried garlic, dried yeast, brown sugar, extractives of paprika, and spices. Breading set in vegetable oil.

The statement, “contains whole grains,” does not indicate that the product is WGR because it is not an FDA standard of identity (refer to “[Method 6: Labels for foods with FDA Standard of Identity](#)” in section 3). The first ingredient in the bread (enriched wheat flour) is not a whole grain.

However, the bread contains two whole grains (white whole-wheat flour and whole-grain corn flour). The SFA obtains a PFS from the manufacturer stating that the bread contains 50 percent enriched wheat flour, 25 percent white whole-wheat flour, and 25 percent whole-grain corn flour. This product meets the WGR criteria because the PFS documents that the *grain portion* of this combination food contains 50 percent whole grains, and the other grain ingredient in the *grain portion* is enriched.

Situation 2: First ingredient is flour blend of whole and enriched flour

A PFS is required when the first ingredient in a commercial grain product is a flour blend of whole and enriched flour. Flour blends do not indicate if the whole grain is the greatest ingredient by weight. For example, if the flour blend is 40 percent of the product’s weight (25 percent whole-wheat flour and 15 percent enriched flour) and the first ingredient after the flour blend is sugar (30 percent of the product’s weight), the sugar weighs more than the whole-wheat flour.

SFAs must obtain a PFS that documents one of the following: 1) the whole grain content is at least 8 grams per ounce equivalent (groups A-E); or 2) the weight of the whole grain in the flour blend is more than the first ingredient (excluding water) listed *after* the flour blend. For example, the PFS for the product below must document that the whole-wheat flour in the flour blend weighs more than the brown sugar.

- Ingredients: Water, **flour blend** [*whole-wheat flour, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzyme, folic acid)*], **brown sugar**, corn oil, dough conditioner (soybean oil, vegetable glycerides, soy flakes), yeast, salt, wheat gluten, enzyme.

A PFS is not required if the flour blend contains only whole grains, such as “*flour blend (whole-wheat flour, whole-grain oats)*.” Products that contain 100 percent whole grains are WGR.

Situation 3: Combination food that contains a WGR grain portion is not CN labeled

A PFS is required when a commercial combination food that contains a WGR grain portion is not CN labeled. Examples include pizza crust in pizza, noodles in lasagna, and baked chicken coated with breadcrumbs or crushed cereal flakes. The PFS must document that whole grains are the greatest ingredient by weight in the *grain portion*.

**Situation 4: Manufacturer claims serving size is less than USDA’s Exhibit A chart**

A PFS is required when a manufacturer claims that a commercial grain product can provide the required creditable grains using a serving that is less than the minimum weight or volume listed in the USDA’s Exhibit A chart (refer to “[Ounce Equivalents](#)” in section 1). An example is a manufacturer that claims a ¾-ounce WGR bagel credits as 1 ounce equivalent of the grains component. The product’s PFS must indicate how the manufacturer obtained this crediting information based on the FBG or the USDA’s regulations, guidance, or policies.

Situation 5: Product is not listed in USDA’s Exhibit A chart

A PFS is required when a commercial WGR product is not listed in any of the nine groups of the USDA’s Exhibit A chart (refer to “[Ounce Equivalents](#)” in section 1). The PFS must indicate the weight of each creditable grain and how the manufacturer obtained the product’s crediting information based on the USDA’s regulations, guidance, or policies.

Documentation for grain foods made from scratch

SFAs must have standardized recipes to document the crediting information per serving for all grain foods made from scratch. This includes foods made by the SFA and foods prepared by vendors for school meals.

The USDA defines a standardized recipe as one that has been tried, adapted, and retried several times for use by a given foodservice operation; and has been found to produce the same good results and yield every time when the exact procedures are used with the same type of equipment, and the same quantity and quality of ingredients. Standardized quantity recipes produce 25 or more servings.

SFAs must ensure that the crediting information for standardized recipes is accurate. The CSDE will review this information during the Administrative Review of the school nutrition programs. For more information, refer to “[Evaluating Recipes for WGR Compliance](#)” in section 4.

For more information on standardized recipes, refer to section 2 of the CSDE’s guide, *Menu Planning Guide for School Meals for Grades K-12*, and visit the “[Crediting Foods Prepared on Site in School Nutrition Programs](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.





5 — How to Evaluate Commercial Products

The WGR compliance of commercial products differs between manufacturers and product brands and varieties. Menu planners must review each commercial grain product used in school menus to determine if it meets the WGR criteria of the NSLP and SBP meal patterns for grades K-12.

This section includes 13 examples of how to evaluate commercial grain products for WGR compliance. If a product meets the WGR criteria, the SFA must determine its ounce equivalents contribution. For more information, refer to “[Serving Size](#)” in section 1.

Color-coding of Ingredients in the Crediting Examples

The information below summarizes the color-coding used to identify the creditable and noncreditable grains in the ingredients statement of each product.

- **Creditable grains:** Creditable grains (whole and enriched) are indicated in **bold green** text. Whole grains are in **bold green UPPERCASE** text. For examples of whole and enriched grains, refer to the CSDE’s resources, *Crediting Whole Grains in the NSLP and SBP* and *Crediting Enriched Grains in the NSLP and SBP*.
- **Noncreditable grains:** Noncreditable grains (such as wheat flour, yellow corn flour, and modified food starch) are indicated in **bold italicized red** text. For more information, refer to “[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)” and [When to ignore noncreditable grains](#)” in section 2. For examples of noncreditable grains, refer to column 1 in [table 2-4](#).
- **Grain derivatives:** Grain derivatives (by-products of grains such as wheat gluten and maltodextrin) are indicated in *pink highlighted italicized* text. These ingredients do not count toward the limit for noncreditable grains. For examples of grain derivatives, refer to column 2 in [table 2-4](#).
- **Non-grain ingredients:** Non-grain ingredients that contain noncreditable grains are indicated in **yellow highlighted** text. Examples include fruit filling made with modified food starch; molasses powder made with wheat starch; and dough conditioner made with soy flakes. For more information, refer to “[When to ignore noncreditable grains](#)” in section 2.

Table 5-1 includes definitions for some common ingredients found in commercial grain products. For additional definitions, refer to the [glossary](#).

Table 5-1. Definitions for common ingredients in commercial grain products

azodicarbonamide (ADA): A chemical substance approved by the FDA for use as a whitening agent in cereal flour and a dough conditioner in bread baking.

bleached flour: Flour treated with chemical agents to speed up the natural aging process and produce a whiter flour with a finer grain and softer texture. Bleached flour is a creditable grain if it is enriched. For information on crediting enriched grains, refer to the CSDE’s resource, [*Crediting Enriched Grains in the NSLP and SBP*](#).

bromated flour: A type of flour with added potassium bromate, which promotes gluten development to improve dough’s baking qualities (such as the rise and elasticity of dough). This flour is more commonly available with ascorbic acid added to provide the elasticity instead of potassium bromate. For information on crediting enriched grains, refer to the CSDE’s resource, [*Crediting Enriched Grains in the NSLP and SBP*](#).

DATEM or datem: An abbreviation for “diacetyl tartaric acid ester of mono- and diglycerides,” which is an emulsifier used in baking. DATEM strengthens the gluten network in dough to improve the bread’s texture and shape.

l-cysteine: An amino acid used in baking to help soften the dough and reduce processing time.

maltodextrin: A carbohydrate derived from starch (typically from corn, potatoes, rice, or wheat) that is used as a food additive to enhance texture and flavor. Maltodextrin is a grain derivative that does not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12.

modified food starch: A chemically altered ingredient made from starch that is used as a thickening agent, stabilizer, or emulsifier. The most common types of modified food starch are made from corn, wheat, potato, and tapioca. Modified food starch is a noncreditable grain that counts toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12.

vital wheat gluten: A powdered form of wheat gluten that is used in baking to add elasticity to flours that are low in gluten, such as whole wheat or rye. Vital wheat gluten is a grain derivative that does not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12.

wheat gluten: The protein component of the wheat grain that helps baked goods hold their shape. Wheat gluten is a grain derivative that does not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12.

whey: A milk protein used to emulsify, thicken, and brown baked goods.

Product 1: Whole-grain bagel brand A (*commercial grain product in group B*)

Ingredients: **WHOLE-WHEAT FLOUR, enriched bromated wheat flour (niacin [a-B vitamin], thiamine mono nitrate [vitamin B-1], ferrous sulfate [iron], potassium bromate, riboflavin [vitamin B-2], and folic acid)**, water, brown sugar granulated sugar.



Contains 2% or less of the following ingredients: salt, *vital wheat gluten*, mono & diglycerides, honey, *cornmeal*, calcium propionate, *malted barley flour*, molasses powder (molasses, *wheat starch*), ammonium chloride, ascorbic acid (vitamin C), l-cysteine hydrochloride, azodicarbonamide (ADA), calcium sulfate, enzymes.

| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|---|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>The first ingredient is whole-wheat flour.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Enriched bromated wheat flour is the only other creditable grain ingredient.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The product contains two noncreditable grains (cornmeal and malted barley flour) listed after the statement, “contains 2% or less.” The product’s PFS must document that the combined weight of these two noncreditable grains does not exceed the limit (refer to “Contains 2% or less” in section 2). The wheat starch (noncreditable grain) in the molasses powder (non-grain ingredient) does not count toward the limit (refer to “When to ignore noncreditable grains” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

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Product 2: Whole-grain bagel brand B *(commercial grain product in group B)*

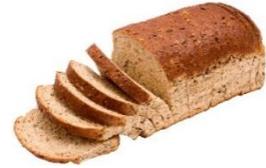
Ingredients: **WHOLE-WHEAT FLOUR**, sugar, *wheat gluten*. Contains 2% or less of each of the following: honey, salt, **yellow corn flour**, yeast, molasses, diacetyl tartaric acid esters of mono-diglycerides (datem), ascorbic acid, mono-and diglycerides, l-cysteine, enzymes.



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|--|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>The first ingredient is whole-wheat flour.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input checked="" type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Whole-wheat flour is the only creditable grain ingredient (100 percent whole grain).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input checked="" type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The product contains only one noncreditable grain (yellow corn flour) listed after “contains 2% or less” (refer to “Contains 2% or less” in section 2).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input checked="" type="checkbox"/> Yes ¹ <i>(all “Yes” boxes are checked in column 2)</i> <input type="checkbox"/> No <i>(any “No” box is checked in column 2)</i> <input type="checkbox"/> Need PFS <i>(any “Need PFS” box is checked in column 2)</i></p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

Product 3: Oat bread (*commercial grain product in group B*)

Ingredients: **Unbleached enriched wheat flour [flour, malted barley flour, reduced iron, niacin, thiamin mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid]**, water, **WHOLE-WHEAT FLOUR, WHOLE OATS**, sugar, *wheat gluten*, yeast, soybean oil, salt, calcium propionate (preservative), monoglycerides, datem and/or sodium stearoyl lactylate, calcium sulfate, citric acid, calcium carbonate, soy lecithin, whey, nonfat milk.



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|--|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>A whole grain is not the first ingredient, but the product contains two whole grains (whole-wheat flour and whole oats). The product’s PFS must document that the combined weight of the two whole grains is more than the weight of the enriched flour.</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Unbleached enriched flour is the only other creditable grain ingredient.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

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Product 4: Frosted cinnamon roll (*commercial grain product in group E*)

Ingredients: Water, flour blend [**WHOLE-WHEAT FLOUR, enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, enzyme, folic acid)**], brown sugar, corn oil, nonfat dry milk, yeast, cinnamon, dough conditioner (soybean oil, vegetable glycerides, **soy flakes**), salt, **wheat gluten** and 2% or less of each of the following: sodium benzoate (to protect flavor), corn syrup solids, icing stabilizer (calcium carbonate, sugar, agar, salt, mono and diglycerides, sorbitan monostearate), vanilla flavor [propylene glycol, water, sodium benzoate (as a preservative)].



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|--|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>Water is the first ingredient and a flour blend (whole wheat and enriched flour) is the second ingredient. The SFA must obtain a PFS stating that the whole-wheat flour is at least 8 grams per ounce equivalent (groups A-G), or weighs more than the first ingredient (brown sugar) after the flour blend (refer to “Commercial products with flour blends” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Enriched flour is the only other creditable grain ingredient.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The soy flakes (noncreditable grain) in the dough conditioner (non-grain ingredient) do not count toward the limit (refer to “When to ignore noncreditable grains” in section 2).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ^{1,2} (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1). ² Grain-based desserts cannot exceed 2 ounce equivalents per week at lunch.</p> | |

Product 5: Apple breakfast bun (*commercial grain product in group E*)

Ingredients: **WHOLE-GRAIN WHITE WHEAT FLOUR**, Apple Filling (corn syrup, **modified food starch**, evaporated apples, cinnamon, lemon juice, locust bean gum, potassium sorbate [preservative]), water, margarine (palm oil, soybean oil, whey [milk], mono and diglycerides, soybean lecithin [soy], natural butter flavor, colored with beta carotene, vitamin A palmitate added), sugar, contains 2% or less of: dough conditioner (**rye flour**, **malted barley flour**, ascorbic acid, enzymes, guar gum, **wheat flour**), nonfat dry milk (nonfat dry milk, whey [milk]), natural orange emulsion (natural flavor, propylene glycol, gum), salt, eggs, egg replacer (**whole soy flour**, wheat gluten, corn syrup solids, algin), yeast (leavening).



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|---|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>The first ingredient is whole-grain white wheat flour.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input checked="" type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Whole-grain white wheat flour is the only creditable grain ingredient (100 percent whole grain).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The noncreditable grains in the non-grain ingredients (highlighted in yellow) do not count toward the limit for noncreditable grains (refer to “When to ignore noncreditable grains” in section 2). This includes the modified cornstarch in the apple filling; rye flour, malted barley flour, and wheat flour in the dough conditioner; and whole soy flour in the egg replacer.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input checked="" type="checkbox"/> Yes ^{1,2} (all “Yes” boxes are checked in column 2) <input type="checkbox"/> No (any “No” box is checked in column 2) <input type="checkbox"/> Need PFS (any “Need PFS” box is checked in column 2)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1). ² Grain-based desserts cannot exceed 2 ounce equivalents per week at lunch.</p> | |

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Product 6: Corn muffin (*commercial grain product in group C*)

Ingredients: Water, sugar, eggs, **WHOLE GRAIN CORN FLOUR, WHOLE-WHEAT FLOUR, enriched flour (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid)**, soybean/canola oil, **modified cornstarch**, milk whey, leavening (sodium acid pyrophosphate, baking soda), vital wheat gluten, sugar, nonfat milk, calcium acetate, xanthan gum, guar gum.



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|--|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a whole grain is the first ingredient. <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>Sugar is the first ingredient (excluding water), but the product also contains two whole grains (whole-grain corn flour and whole-wheat flour). The product’s PFS must document that the combined weight of the whole grains is more than the weight of the sugar (refer to “Commercial products with multiple whole grains” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Enriched flour is the only other creditable grain.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if.</p> <ul style="list-style-type: none"> <input type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The product contains one noncreditable grain (modified cornstarch) without the statement, “contains 2% or less.” The product’s PFS must document that the weight of the modified cornstarch does not exceed the limit (refer to “Contains 2% or less” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

Product 7: Blueberry muffin (*commercial grain product in group D*)

Ingredients: **WHOLE-WHEAT FLOUR**, sugar, eggs, water, blueberries, **enriched flour (flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid)**, invert sugar, soybean oil, contains 2% or less of: palm oil, canola oil, propylene glycol mono- and diesters of fats and fatty acids, **oat fiber**, leavening (baking soda, sodium aluminum phosphate, monocalcium phosphate), mono- and diglycerides, **modified food starch**, potassium sorbate (preservative), sodium alginate, salt, soy lecithin, natural and artificial flavor, sodium stearoyl lactylate, **wheat starch**, blueberry juice concentrate, malic acid, enzymes.



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|--|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>Whole-wheat flour is the first ingredient.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Enriched flour is the only other creditable grain.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The product contains three noncreditable grains (oat fiber, modified food starch, and wheat starch) listed after the statement, “contains 2% or less.” The product’s PFS must document that the combined weight of these three noncreditable grains does not exceed the limit (refer to “Contains 2% or less” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

5 | How to Evaluate Commercial Products

Product 8: Cereal bar (commercial grain product in group E)

Ingredients: **WHOLE-GRAIN OATS**, Cereal (**WHOLE-GRAIN WHEAT**, sugar, **cornmeal**, brown sugar syrup, canola oil, dextrose, baking soda, salt, calcium carbonate, trisodium phosphate, zinc and iron [mineral nutrients], vitamin C, niacinamide, vitamin B6 [pyridoxine hydrochloride], vitamin B2 [riboflavin], vitamin B1 [thiamin mononitrate], vitamin A [palmitate], folic acid, vitamin B12, vitamin D, BHT added to retain freshness), sugar, canola oil, **BROWN RICE FLOUR**), marshmallows (sugar, dextrose, **modified cornstarch**, corn syrup, gelatin, natural and artificial flavor), maltodextrin. Contains 2% or less of: **WHOLE-CORN FLOUR**, glycerin, **WHOLE-GRAIN OAT FLOUR**, **wheat starch**, **modified wheat starch**, salt, gelatin, natural flavor.



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|---|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>The first ingredient is whole-grain oats.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input checked="" type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>The other creditable grain ingredients include whole grain-wheat and brown rice flour in the fortified breakfast cereal (highlighted in blue), and whole-corn flour and whole-grain oat flour.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The product contains two noncreditable grains (wheat starch and modified wheat starch) listed after the statement, “contains 2% or less.” The PFS must document that the combined weight of these two noncreditable grains does not exceed the limit (refer to “Contains 2% or less” in section 2). The cornmeal (noncreditable grain) in the cereal (highlighted in blue) does not count toward the limit for noncreditable grains because fortified whole-grain breakfast cereals are exempt from the limit (refer to “When to ignore noncreditable grains” in section 2). The modified cornstarch (noncreditable grain) in the marshmallows (non-grain ingredient) does not count toward the limit for noncreditable grains.</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ^{1,2} (all “Yes” boxes are checked in column 2) <input type="checkbox"/> No (any “No” box is checked in column 2) <input checked="" type="checkbox"/> Need PFS (any “Need PFS” box is checked in column 2)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1). ² Grain-based desserts cannot exceed 2 ounce equivalents per week at lunch.</p> | |

Product 9: French toast (*commercial grain product in group E*)

Ingredients: **Whole-wheat bread (WHOLE-WHEAT FLOUR, water, enriched wheat flour [flour, malted barley flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid]**, sugar, *wheat gluten*, yeast, salt, soybean oil, calcium propionate (preservative), datem, calcium sulfate, citric acid, soy lecithin, grain vinegar, potassium iodate), water, **whole-wheat batter (WHOLE-WHEAT FLOUR, sugar, enriched bleached wheat flour [enriched with niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid]**, dextrose, eggs, *yellow corn flour*, corn syrup solids, natural flavor, *modified cornstarch*, salt, leavening (sodium aluminum phosphate, sodium bicarbonate), nonfat milk, spice), **coating (bleached enriched wheat flour [wheat flour, niacin, iron, thiamine mononitrate, riboflavin, folic acid], yellow corn flour, sugar, soy flour, salt, dextrose, leavening [sodium bicarbonate, monocalcium phosphate], yeast), soybean oil, cinnamon sugar (sugar, spices, natural flavor, silicon dioxide [added to prevent caking]).**



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|---|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>The first ingredient in the bread is whole-wheat flour.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>All other creditable grain ingredients are either whole grains (whole-wheat flour in the batter) or enriched grains (enriched wheat flour in the bread, batter, and coating).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The product contains two noncreditable grains (yellow corn flour and modified cornstarch) in the batter and two noncreditable grains (yellow corn flour and soy flour) in the coating. The PFS must document that the combined weight of these four noncreditable grains does not exceed the limit (refer to “Contains 2% or less” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1). ² Grain-based desserts cannot exceed 2 ounce equivalents per week at lunch.</p> | |

5 | How to Evaluate Commercial Products

Product 10: Tortilla chips (*commercial grain product in group B*)

Ingredients: **Yellow corn (enriched with thiamine, riboflavin, niacin, iron, folic acid)**, vegetable oil (contains one or more of the following: canola oil, corn oil, sunflower oil), salt.



| Column 1: WGR criteria for commercial grain products | Column 2: Meets criterion |
|---|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a whole grain is the first ingredient; or <input type="checkbox"/> water is the first ingredient and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient, but the product’s PFS indicates that the combined weight of all whole grains is the greatest ingredient by weight. <p><i>Enriched yellow corn is the first ingredient.</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>Enriched yellow corn is the only creditable grain ingredient.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the product does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the product lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The product does not contain any noncreditable grains.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input checked="" type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

Product 11: Cheese ravioli (*combination food with pasta from group H*)

Ingredients: **Filling:** Fat-free ricotta cheese (whey, skim milk [made from nonfat dry milk powder], vinegar, xanthan gum, carrageenan), egg, low moisture part skim mozzarella cheese (cultured part skim milk, salt, enzymes), whey protein isolate, sodium caseinate, romano cheese made from cow’s milk (cultured milk, salt, enzymes), **bleached wheat flour**, garlic salt (salt, dehydrated garlic), salt, **modified cornstarch**, sugar, dehydrated garlic. **Pasta: WHOLE-WHEAT FLOUR, enriched durum wheat flour (wheat flour, niacin, ferrous sulfate, thiamin mononitrate, riboflavin, folic acid)**, water, egg.



| Column 1: WGR criteria for commercial combination foods (<i>grain portion listed separately</i>) | Column 2: Meets criterion |
|---|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient in the grain portion; or <input type="checkbox"/> water is the first ingredient in the grain portion and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient in the grain portion, but the product’s PFS indicates that the combined weight of all whole grains in the grain portion is the greatest ingredient by weight. <p><i>White whole-wheat flour is the first ingredient in the grain portion (pasta).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains in the grain portion are enriched (except whole grains); or <input type="checkbox"/> the grain portion is 100 percent whole grain (all creditable grains are whole). <p><i>Enriched durum wheat flour is the only other creditable grain ingredient in the grain portion.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the grain portion does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the grain portion lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The grain portion does not contain any noncreditable grains. The two noncreditable grains (bleached wheat flour and modified cornstarch) in the filling (non-grain portion) do not count toward the limit (refer to “When to ignore noncreditable grains” in section 2).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input checked="" type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The grain portion serving must provide the required volume or weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

5 | How to Evaluate Commercial Products

Product 12: Breaded chicken nuggets (*combination food with breading from group A*)

Ingredients: Chicken, water, salt, and natural flavor. **Breaded with: WHITE WHOLE-WHEAT FLOUR**, water, **wheat starch**, **enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid)**, salt, contains 2% or less of the following: **yellow corn flour**, **cornstarch**, dried onion, dried garlic, dried yeast, brown sugar, extractives of paprika, and spices. Breading set in vegetable oil.



| Column 1: WGR criteria for commercial combination foods (<i>grain portion listed separately</i>) | Column 2: Meets criterion |
|--|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient in the grain portion. <input type="checkbox"/> water is the first ingredient in the grain portion and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient in the grain portion, but the product’s PFS indicates that the combined weight of all whole grains in the grain portion is the greatest ingredient by weight. <p><i>White whole-wheat flour is the first ingredient in the grain portion (breading).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains in the grain portion are enriched (except whole grains); or <input type="checkbox"/> the grain portion is 100 percent whole grain (all creditable grains are whole). <p><i>Enriched flour is the only other creditable grain in the grain portion.</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the grain portion does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the grain portion lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The grain portion contains three noncreditable grains (wheat starch, yellow corn flour, and cornstarch). The PFS must document that the combined weight of these three noncreditable grains does not exceed the limit (refer to “Contains 2% or less” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The grain portion serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

Product 13: Chicken vegetable egg roll (*combination food with egg roll from group B*)

Ingredients: **Filling:** Chicken, cabbage, carrots, celery, water, onion, contains 2% or less of: dried whole egg, whey protein concentrate, natural flavor, sugar, soy sauce powder (soy sauce [*wheat*, soybeans, salt], maltodextrin, salt), **modified food starch**, dehydrated onions, salt, garlic, spice; **Wrapper: WHITE WHOLE-WHEAT FLOUR**, water, **enriched flour (wheat flour [niacin, reduced iron, thiamine mononitrate, riboflavin, folic acid], malted barley flour)**, **enriched durum flour (wheat flour, niacin, ferrous sulfate, thiamine mononitrate, riboflavin, folic acid)**, contains 2% or less of: wheat gluten, canola oil, natural flavor, **cornstarch**; water. Fried in vegetable oil (soybean, cottonseed, corn, and/or canola oil).



| Column 1: WGR criteria for commercial combination foods (<i>grain portion listed separately</i>) | Column 2: Meets criterion |
|--|---|
| <p>Criterion 1: The product meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> a whole grain is the first ingredient in the grain portion. <input type="checkbox"/> water is the first ingredient in the grain portion and a whole grain is the second ingredient; or <input type="checkbox"/> a whole grain is not the first ingredient in the grain portion, but the product’s PFS indicates that the combined weight of all whole grains in the grain portion is the greatest ingredient by weight. <p><i>White whole-wheat flour is the first ingredient in the grain portion (wrapper).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 1 are unchecked</i> |
| <p>Criterion 2: The product meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains in the grain portion are enriched (except whole grains); or <input type="checkbox"/> the product is 100 percent whole grain (all creditable grains are whole). <p><i>The other creditable grain ingredients in the grain portion are enriched (enriched flour and enriched durum flour).</i></p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 2 are unchecked</i> |
| <p>Criterion 3: The product meets the noncreditable grains limit if.</p> <ul style="list-style-type: none"> <input type="checkbox"/> the grain portion does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the grain portion lists only one noncreditable grain after “contains 2% or less” and does not contain any other noncreditable grains; or <input type="checkbox"/> the PFS indicates that the combined weight of all noncreditable grains does not exceed the limit per ounce equivalent: 3.99 grams for groups A-G; or 6.99 grams for groups H-I (refer to “WGR Criterion 3 – Noncreditable Grains Meet Limit” in section 2). <p><i>The PFS must document that the noncreditable grain (malted barley flour) in the grain portion does not exceed the limit. The cornstarch (noncreditable grain) listed after “contains 2% or less” and the wheat and modified food starch (noncreditable grains) in the filling (non-grain portion) do not count toward the limit (refer to “Contains 2% or less” and “When to ignore noncreditable grains” in section 2).</i></p> | <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Need PFS: <i>Check this box if all boxes for criterion 3 are unchecked</i> |
| <p>Is product WGR? <input type="checkbox"/> Yes ¹ (<i>all “Yes” boxes are checked in column 2</i>) <input type="checkbox"/> No (<i>any “No” box is checked in column 2</i>) <input checked="" type="checkbox"/> Need PFS (<i>any “Need PFS” box is checked in column 2</i>)</p> | |
| <p>¹ The grain portion serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |



6 — How to Evaluate a PFS

The manufacturer’s PFS provides information about how a processed grain product might contribute to the USDA’s meal patterns for Child Nutrition Programs. However, unlike CN labels, PFS forms do not provide any guarantee of the product’s meal pattern contribution. Therefore, the SFAs is responsible for verifying and keeping records of PFS forms. SFAs should check the crediting information on the manufacturer’s PFS for accuracy **before** including the commercial grain product in reimbursable meals. This section provides guidance on how to evaluate PFS forms for commercial grain products.

Parts of the USDA’s PFS Form for Grains

SFAs should determine if the manufacturer’s PFS provides the information required to document that the product meets the grain crediting criteria.. [Table 6-1](#) shows an example of a completed USDA *Product Formulation Statement for Documenting Grains in Child Nutrition Programs* for the grams of creditable grains in a commercial grain product. The USDA’s PFS form for grams of creditable grains includes the following information:

- manufacturer name,
- product name;
- product code number;
- product serving size;
- whether the product meets the WGR criteria;
- whether the product contains noncreditable grains and if so, how many grams;
- Exhibit A grains group for the product;
- a description of the creditable grain ingredient, grams of creditable grain ingredient per portion, the gram standard of creditable grains per ounce equivalent (16 grams or 28 grams), and the creditable amount;
- total weight (per portion) of product as purchased;
- total grains contribution of product per portion;
- certification statement for the official company representative indicating the weight (ounces) and grains contribution (ounce equivalents) of the portion; and
- the name, title, phone number, signature of the official company representative, and date signed.

Manufacturers may use a format that is different from the USDA’s PFS form. However, the manufacturer’s PFS must include the information needed to determine how the product contributes to the meal pattern requirements.

Table 6-1. Sample PFS Form for Grams of Creditable Grains



United States Department of Agriculture

Food and Nutrition Service

**Product Formulation Statement for Documenting Grains
in Child Nutrition Programs**

(Crediting Standards Based on Grams of Creditable Grains (ounce equivalents))

Child Nutrition (CN) Program Operators should include a copy of the label from the purchased product package in addition to the following information on letterhead signed by an official company representative. CN Program Operators have the option to choose the crediting method that best fits their specific needs for menu planning.

A Product Name: Wheat Smile Pancakes Code No.: 123456
 Manufacturer: ABC Bread Company Serving Size: 2 pancakes: 50 grams (1.75 ounces)
(raw dough weight may be used to calculate creditable grain amount)

B I. Does the product meet the Whole Grain-Rich Criteria: Yes No

C II. Does the product contain non-creditable grains: Yes No How many grams: **D**
(Products with more than 0.24 ounce (oz.) equivalent (eq.) or 3.99 grams (g) for Groups A-G or 6.99g for Groups H and I of non-creditable grains may not credit towards the grain requirements for school meals.)

III. Use Exhibit A: Grain Requirements for Child Nutrition Programs in the FBG to determine if the product fits into Groups A-G (baked goods), Group H (cereal grains) or Group I (RTE breakfast cereals). *(Different methodologies are applied to calculate servings of grain component based on creditable grains. Groups A-G use the standard of 16g creditable grain per oz. eq.; Group H uses the standard of 28g creditable grain per oz. eq.; and Group I is reported by volume or weight.)*

E Indicate to which Exhibit A Group (A-I) the Product Belongs: C

| DESCRIPTION OF CREDITABLE GRAIN INGREDIENT* | GRAMS OF CREDITABLE GRAIN INGREDIENT PER PORTION ¹ | GRAM STANDARD OF CREDITABLE GRAIN PER OZ. EQUIVALENT (16g or 28g) ² | CREDITABLE AMOUNT |
|---|---|--|-------------------|
| | A | B | A + B |
| Whole-wheat flour (30%) | 15 | 16 | 0.9375 |
| Enriched flour (22%) | 11 | 16 | 0.6875 |
| | | | |
| | | I Total | 1.625 |
| | J Total Creditable Amount ³ | | 1.5 |

* Creditable grains vary by CN Program. See the FBG for specific Program requirements.

¹ (Serving size) X (% of creditable grain in formula). Please be aware that serving sizes other than grams must be converted to grams.

² Standard grams of creditable grains from the corresponding Group in Exhibit A.

³ Total Creditable Amount must be rounded **down** to the nearest quarter (0.25) oz. eq. Do **not** round up.

K Total weight (per portion) of product as purchased 1.75 ounces

Total contribution of product (per portion) 1.5 oz. eq.

L I certify that the above information is true and correct and that a 1.75 ounce portion of this product (ready for serving) provides 1.5 oz. eq. grains. I further certify that non-creditable grains are **not** above 0.24 oz. eq. per portion. Products with more than 0.24 oz. eq. or 3.99g for Groups A-G or 6.99g for Groups H and I of non-creditable grains may not credit towards the grain requirements for school meals.

M John Smith
 Signature
John Smith
 Printed Name

President, ABC Bread Company
 Title
11/3/2020 123-456-7890
 Date Phone Number

November 2019

How to review a grain product's PFS

The guidance below indicates what menu planners should consider when reviewing the accuracy of a grain product's PFS. The green circles refer to the sections of the USDA's PFS form for grains in [table 6-1](#).

A Product information: Check that the product name, code number, manufacturer, and serving size on the PFS match the information on the product packaging.

B Part I: "Does the product meet the whole grain-rich criteria"
If "Yes" is checked, review the information for noncreditable grains (C) and creditable grain ingredients (F). To be WGR, the total weight of the whole-grain ingredients (H) must be equal to or more than the weight of the enriched grain ingredients (H).

- For this example, 15 grams of whole-wheat flour is more than 11 grams of enriched flour

C Part II: "Does the product contain noncreditable grains"
If "No" is checked, review the **product's ingredients statement** to determine if any noncreditable grains are listed. For examples of noncreditable grains, refer to [table 2-4](#).

Incorrectly stating that the product does not contain any noncreditable grains is the **most common error** on PFS forms for grain products.

D Part II: "How many grams"
If "Yes" is checked (C), the PFS must indicate the total grams of noncreditable grains (D) **or** include a statement that the product contains less than the applicable limit for noncreditable grains in school meals, e.g., "<3.99 grams" for groups A-G or "<6.99 grams" for groups H-I. For information on determining if noncreditable grains comply with the limit, refer to "[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)" in section 2.

If the product's ingredients statement contains **more than one** noncreditable grain, confirm with the manufacturer that the grams listed in part II (D) include the **combined weight of all noncreditable grains** in the product's ingredients statement.

Example: A PFS indicates that the product contains 1 gram of noncreditable grains. The product's ingredients statement includes four noncreditable grains: oat bran; modified cornstarch; wheat flour; and rice starch. The SFA should check with the manufacturer to verify that the 1 gram includes the **combined weight** of the four noncreditable grains.

E **Part III: “Indicate to which Exhibit A grain group (A-I) the product belongs”**
Check that the PFS lists the correct Exhibit A grain group for the product. For example, the PFS for bread must list group B and the PFS for pancakes must list group C. For more information, refer to the CSDE’s resource, *Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP*.

- For this example, group C is the correct group for pancakes.

F **Part III chart: “DESCRIPTION OF CREDITABLE GRAIN INGREDIENT” (first column)**

Review the **product’s ingredients statement** to identify all creditable grains (whole and enriched). Check that the PFS lists the **same** creditable grains. For guidance on identifying creditable grains, refer to the CSDE’s resources, *Crediting Whole Grains in the NSLP and SBP* and *Crediting Enriched Grains in the NSLP and SBP*.

G **Part III chart: “GRAM STANDARD OF CREDITABLE GRAIN PER OZ. EQUIVALENT (16g or 28g)” (third column)**

Check that the PFS uses the correct gram standard for each creditable grain ingredient (F), based on the product’s Exhibit A grain group listed above the chart (E).

- Groups A-G (baked goods) require 16 grams of creditable grains to credit as 1 ounce equivalent.
- Group H (cereal grains) requires 28 grams of creditable grains to credit as 1 ounce equivalent.
- Group I (RTE breakfast cereals) requires 28 grams (1 ounce) or the equivalent volume indicated in Exhibit A (1 cup for flaked and round cereals, 1¼ cups for puffed cereals, and ¼ cup for granola) to credit as 1 ounce equivalent.

H **Part III chart: “CREDITABLE AMOUNT” (fourth column)**

Check that the calculation for the creditable amount of each creditable grain ingredient is correct. For each ingredient listed in column 1 (F), divide the “GRAMS OF CREDITABLE GRAIN INGREDIENT PER PORTION” in column 2 by the “GRAM STANDARD OF CREDITABLE GRAIN PER OZ. EQUIVALENT” in column 3 (G).

- For this example, 15 grams divided by 16 grams equals 0.9375 ounce equivalents (whole-wheat flour); and 11 grams divided by 16 grams equals 0.6875 ounce equivalents (enriched flour).

- I Part III chart: “Total” (bottom of fourth column)**
Check that the “Total” at the bottom of column 4 equals the sum of all creditable grain ingredients.
- For this example, 0.9375 ounce equivalents (whole-wheat flour) plus 0.6875 ounce equivalents (enriched flour) equals 1.625 ounce equivalents.
- J Part III chart: “Total Creditable Amount” (bottom of fourth column)**
Check that the “Total Creditable Amount” at the bottom of column 4 is rounded **down** to the nearest quarter ($\frac{1}{4}$) ounce equivalent. For example, 1.625 ounce equivalents round down to 1.5 ounce equivalents; 1.49 ounce equivalents and 1.27 ounce equivalents round down to 1.25 ounce equivalents; and 1.24 ounce equivalents round down to 1 ounce equivalent.
- For this example, 1.625 ounce equivalents rounds down to 0.5 ounce equivalents.
- K “Total weight (per portion) of product as purchased” and “Total contribution of product (per portion)”**
Check that the total weight per portion as purchased in this section is the same as the serving size listed at the top of the PFS (A). Check that the total contribution per portion (ounce equivalents) in this section is the same as the “Total Creditable Amount” (J) listed at the bottom of column 4 in the chart.
- For this example, 1.75 ounces is listed in both sections and 1.5 ounce equivalents is listed in both sections.
- L Certification statement**
Check that the portion size and grain ounce equivalents contribution in the certification statement is the same as the information listed just above the certification statement (K).
- M Signature**
Check that the manufacturer’s PFS is on company letterhead and is signed and dated by an official company representative. The signature can be handwritten, stamped, or electronic.

SFAs must maintain PFS forms and supporting information on file to document meal pattern compliance for auditing purposes. For more information on the required WGR documentation, refer to [section 4](#).

Common compliance issues for grain PFS forms

The CSDE has observed several compliance issues with PFS forms for commercial grain products. The most common compliance issues include:

- incomplete or missing information; and
- incorrectly stating that the product does not contain noncreditable grains when they are listed on the ingredients statement.

PFS forms that do not provide sufficient information cannot be accepted as crediting documentation for school meals. If the PFS is incomplete or inaccurate, the SFA must request a revised PFS from the manufacturer, with supporting documentation, if needed.

7 — WGR Criteria for Foods Made from Scratch

SFAs must have standardized recipes on file that document the crediting information for all grain foods made from scratch. This includes foods made on site by the SFA and foods prepared by vendors.

Standardized recipes must document the weight (grams) of creditable grains (whole and enriched) per serving. Recipes for grain foods are WGR if they meet the following three criteria:

- the recipe contains at least 50 percent whole grains by weight (i.e., the combined weight of the whole grains is equal to or more than the combined weight of the enriched grains);
- all grains except whole grains are enriched; and
- the combined weight of any noncreditable grains (such as bran, germ, and cornstarch) does not exceed the required limit (refer to “[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)” in section 2).

For example, a standardized recipe for pizza dough that contains 6 pounds of whole-wheat flour and 5 pounds of enriched flour is WGR because the whole-wheat flour weighs more than the enriched flour. Table 7-1 summarizes the WGR criteria for grain foods made on site.

SFAs must determine the ounce equivalents of WGR standardized recipes. The serving of a WGR recipe must provide the required weight (groups A-E) or volume (groups H-I) for the applicable grain group in the USDA’s Exhibit A chart or contain the minimum creditable grains. For more information, refer to “[Serving Size](#)” in section 1. For information on how to determine the WGR ounce equivalents contribution of a standardized recipe, refer to the CSDE’s resource, *Calculation Methods for Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP*.



Table 7-1. WGR criteria for grain foods made on site

These three WGR criteria apply to all foods made from scratch, including foods prepared by the SFA or other entities on site, and foods prepared by vendors for school meals. A standardized recipe must meet all three criteria to be WGR.

WGR criterion 1: The standardized recipe must contain at least 50 percent whole grains by weight. A standardized recipe meets this criterion if 1) the combined weight of all whole grains is equal to or more than the combined weight of all enriched grains; or 2) the recipe contains only whole grains.

For combination foods made on site that contain a grain portion (such as pizza crust in pizza and breading on chicken), the WGR criteria apply only to the **grain portion** of the standardized recipe. For information on identifying whole grains, refer to the CSDE's resource, *Crediting Whole Grains in the NSLP and SBP*.

WGR criterion 2: All creditable grains (other than whole grains) in the standardized recipe must be enriched. For information on identifying enriched grains, refer to the CSDE's resource, *Crediting Enriched Grains in the NSLP and SBP*.

WGR criterion 3: Any noncreditable grains (such as bran, germ, and cornstarch) must be less than 2 percent ($\frac{1}{4}$ ounce equivalent) per ounce equivalent. To comply with this limit, the combined total of all noncreditable grains cannot exceed:

- 3.99 grams per ounce equivalent for groups A-G; or
- 6.99 grams per ounce equivalent for groups H-I.

If noncreditable grains exceed these amounts, the standardized recipe is noncreditable, even if it meets WGR criteria 1 and 2. For examples of noncreditable grains, refer to [table 2-4](#).

How to Evaluate Recipes for WGR Compliance

Standardized recipes list the measurements for grain ingredients by weight (pounds and ounces) and volume (e.g., cups and quarts). SFAs must use the **weight** measurements to determine if the standardized recipe is WGR.

For assistance with recipe calculations, such as converting fractions to decimals, refer to the ICN's *Basics at a Glance Portion Control Poster*, and the decimal equivalents of fractions in the “[Introduction](#)” section of the USDA's *Food Buying Guide for Child Nutrition Programs*. Table 7-2 shows an example of how to determine if a standardized recipe is WGR.



Table 7-2. Evaluating WGR compliance of a standardized recipe

| Corn Muffin (25 servings) | | |
|----------------------------|--------|--------------|
| Ingredients | Weight | Measure |
| Whole-wheat flour | 8 oz | 1½ cups |
| White whole-grain cornmeal | 8 oz | 1¼ cups |
| Sugar | 3 oz | ⅓ cup 2 Tbsp |
| Baking powder | | ¾ tsp |
| Frozen whole eggs, thawed | 3 oz | ⅓ cup |
| Nonfat milk | | 1¾ cups |
| Canola oil | | ¼ cup |

| Column 1: WGR criteria for foods made on site | Column 2: Meets criterion |
|--|--|
| <p>Criterion 1: The recipe meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the combined weight of all whole grains is equal to or more than the combined weight of all enriched grains; or <input checked="" type="checkbox"/> the recipe is 100 percent whole grain (all creditable grains are whole). | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Criterion 2: The recipe meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input checked="" type="checkbox"/> the recipe is 100 percent whole grain (all creditable grains are whole). | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Criterion 3: The recipe meets the noncreditable grains limit if.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the recipe does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the combined weight of all noncreditable grains does not exceed the ounce equivalent limit (3.99 grams for groups A-G or 6.99 grams for groups H-I). | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Is the recipe WGR? <input checked="" type="checkbox"/> Yes ¹ (all “Yes” boxes are checked in column 2) <input type="checkbox"/> No (any “No” box is checked in column 2)</p> | |
| <p>¹ The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

Recipes that are not standardized

Recipes that are not standardized (such as recipes used at home) typically list only the volume of grain ingredients. To determine if these recipes are WGR, SFAs must first convert the volume of the grain ingredients to **weight (grams)**. SFAs may use any of the methods below for this calculation.

- **Nutrition Facts label:** Use the manufacturer’s serving size information on the Nutrition Facts label for the grain ingredient, such as whole-wheat flour, enriched flour, or whole-grain cornmeal. Multiply the weight (grams) of the manufacturer’s serving by 4 to get the grams per cup, then multiply the grams per cup by the number of cups used in the recipe.



| Nutrition Facts | |
|--------------------|---------------|
| Serving Size | 1/4 cup (32g) |
| Amount Per Serving | |
| Calories | 110 |

For example, a recipe contains 2 cups of whole-wheat flour and 2 cups of enriched flour.

- Whole wheat flour: The Nutrition Facts label for the whole-wheat flour states that ¼ cup weighs 32 grams, which equals 128 grams per cup. Multiply the grams per cup (128 grams) by the number of cups used in the recipe (2 cups) to determine the total weight of the grain ingredient in the recipe (256 grams).
- Enriched flour: The Nutrition Facts label for the enriched flour states that ¼ cup weighs 30 grams, which equals 120 grams per cup. Multiply the weight per cup (120 grams) by the amount of enriched flour used in the recipe (2 cups) to determine the weight of the enriched flour used in the recipe (240 grams).

This recipe is WGR because the whole-wheat flour (256 grams) weighs more than the enriched flour (240 grams).

- **Nutrient database:** Search the USDA’s [FoodData Central](#) nutrient database for grain ingredients, such as whole-wheat flour or yellow cornmeal. Enter “1” in the data field for the cup measurement, and the database will provide the weight of 1 cup of that ingredient.
- **Volume equivalent chart:** Use a volume equivalent chart that lists the weight of 1 cup of grain ingredients. For more information, refer to the CSDE’s resource, [Calculation Methods for Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP](#).
- **Yield study:** Determine the average weight of 1 cup of the grain ingredient by measuring and weighing several samples. For more information, refer to “Table 6. Weights of 1 cup of commonly used grain ingredients” in the CSDE’s [Yield Study Data Form for Child Nutrition Programs](#).

7 | WGR Criteria for Foods Made from Scratch

Tables 7-3 and 7-4 show examples of how to evaluate recipes that are not standardized. The menu planner must determine the weight of each grain ingredient by converting cups (volume) to grams (weight).

| Table 7-3. Example 1: Evaluating a recipe with grains ingredients in cups | | | | |
|---|---------|----------------------------|---|----------------|
| Grain ingredients | Measure | Convert cups to grams | | |
| | | Grams per cup ¹ | | Weight (grams) |
| Whole-wheat flour | 1½ cups | x 120 | = | 180.00 grams |
| Enriched flour | 1¼ cups | x 125 | = | 156.25 grams |

| Column 1: WGR criteria for foods made on site | Column 2: Meets criterion |
|--|--|
| <p>Criterion 1: The recipe meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the combined weight of all whole grains is equal to or more than the combined weight of all enriched grains; or <input type="checkbox"/> the recipe is 100 percent whole grain (all creditable grains are whole grains). <p><i>The whole-wheat flour (180 grams) weighs more than the enriched flour (156.25 grams).</i></p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Criterion 2: The recipe meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the recipe is 100 percent whole grain (all creditable grains are whole grains). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Criterion 3: The recipe meets the noncreditable grains limit if.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the recipe does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the combined weight of all noncreditable grains does not exceed the ounce equivalent limit (3.99 grams for groups A-G or 6.99 grams for groups H-I). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Is the recipe WGR?</p> <p><input checked="" type="checkbox"/> Yes ¹ (all “Yes” boxes are checked in column 2)</p> <p><input type="checkbox"/> No (any “No” box is checked in column 2)</p> | |
| <p>¹ The grams per cup are from the USDA’s FoodData Central database (Standard Reference (SR) Legacy Data).</p> <p>² The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |

Table 7-4. Example 2: Evaluating a recipe with grains ingredients in cups

| Grain ingredients | Measure | Convert cups to grams | | |
|-------------------|---------|----------------------------|---|----------------|
| | | Grams per cup ¹ | | Weight (grams) |
| Whole-wheat flour | 2 cups | x 120 | = | 240 grams |
| Enriched flour | 2 cups | x 125 | = | 250 grams |

| Column 1: WGR criteria for foods made on site | Column 2: Meets criterion |
|--|--|
| <p>Criterion 1: The recipe meets the whole grain criterion if:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the combined weight of all whole grains is equal to or more than the combined weight of all enriched grains; or <input type="checkbox"/> the recipe is 100 percent whole grain (all creditable grains are whole grains). <p><i>This recipe does not contain at least 50 percent whole grains because the enriched flour (250 grams) weighs more than the whole-wheat flour (240 grams),</i></p> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <p>Criterion 2: The recipe meets the enriched grain criterion if:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> all creditable grains (other than whole grains) are enriched; or <input type="checkbox"/> the recipe is 100 percent whole grain (all creditable grains are whole grains). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Criterion 3: The recipe meets the noncreditable grains limit if.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> the recipe does not contain any noncreditable grains (refer to table 2-4); or <input type="checkbox"/> the combined weight of all noncreditable grains does not exceed the ounce equivalent limit (3.99 grams for groups A-G or 6.99 grams for groups H-I). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>Is the recipe WGR?</p> <p><input type="checkbox"/> Yes ¹ (all “Yes” boxes are checked in column 2)</p> <p><input checked="" type="checkbox"/> No (any “No” box is checked in column 2)</p> | |
| <p>¹ The grams per cup are from the USDA’s FoodData Central database (Standard Reference (SR) Legacy Data).</p> <p>² The serving must provide the required weight for the applicable group in the USDA’s Exhibit A chart or contain the minimum creditable grains (refer to “Serving Size” in section 1).</p> | |



8 — Resources

Crediting Documentation for Grains

Accepting Processed Product Documentation in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/AcceptDocumentationSNP.pdf>

Child Nutrition (CN) Labeling Food Manufacturers/Industry (USDA webpage):

<https://www.fns.usda.gov/cnlabeling/food-manufacturersindustry>

Child Nutrition (CN) Labeling Program (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CNlabel.pdf>

Crediting Commercial Processed Products for Grades K-12 in School Nutrition Programs (CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs#CommercialProducts>

Crediting Foods Prepared on Site for Grades K-12 in School Nutrition Programs (CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs#PreparedonSite>

Food Buying Guide Section 4: Overview of Crediting Requirements for the Grains Component (USDA):

https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/USDA_FBG_Section4_Grains.pdf

Food Buying Guide Section 4: Yield Table for Grains (USDA):

https://foodbuyingguide.fns.usda.gov/files/Reports/USDA_FBG_Section4_GrainsYieldTable.pdf

FoodData Central Nutrient Database (USDA):

<https://fdc.nal.usda.gov/>

Product Formulation Statement for Documenting Grains in Child Nutrition Programs (USDA):

https://fns-prod.azureedge.net/sites/default/files/resource-files/PFS_Document_Grains_oz_eq.pdf

Product Formulation Statement for Documenting Grains in Child Nutrition Programs – Completed Sample (USDA):

https://fns-prod.azureedge.net/sites/default/files/resource-files/PFS_Sample_oz_eq.pdf

Product Formulation Statements (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/PFS.pdf>

Standardized Recipes (CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs#StandardizedRecipes>

Tips for Evaluating a Manufacturer's Product Formulation Statement (USDA):

<https://fns-prod.azureedge.net/sites/default/files/cn/manufacturerPFStipsheet.pdf>

Yield Study Data Form for Child Nutrition Programs (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/YieldStudy.pdf>

Crediting Requirements for Grains

Comparison of Meal Pattern Requirements for the Grains Component in the School Nutrition Programs (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/ComparisonGrainCreditingSNP.pdf>

Crediting Breakfast Cereals for Grades K-12 in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditCerealsSNPgradesK-12.pdf>

Crediting Enriched Grains in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditEnrichedGrainsSNP.pdf>

Crediting Whole Grains in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/CreditWholeGrainsSNP.pdf>

Food Buying Guide for Child Nutrition Programs (USDA):

<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>

Grains Component for Grades K-12 (Documents/Forms section of CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#Grains>

USDA Memo SP 30-2012: Grain Requirements for the National School Lunch Program and School Breakfast Program:

<https://www.fns.usda.gov/school-meals/grain-requirements-national-school-lunch-program-and-school-breakfast-program>

USDA Memo SP 34-2019, CACFP 15-2019 and SFSP 15-2019: Crediting Coconut, Hominy, Corn Masa, and Masa Harina in the Child Nutrition Programs:

<https://www.fns.usda.gov/cn/crediting-coconut-hominy-corn-masa-and-masa-harina-child-nutrition-programs>

USDA Memo SP 23-2019, CACFP 10-2019 and SFSP 09-2019: Crediting Popcorn in the Child Nutrition Programs:

<https://www.fns.usda.gov/cn/crediting-popcorn-child-nutrition-programs>

USDA Memo SP 23-2019, CACFP 10-2019 and SFSP 9-2019: Crediting Popcorn in the Child Nutrition Programs:

<https://www.fns.usda.gov/school-meals/crediting-popcorn-child-nutrition-programs>

Ounce Equivalents

Calculation Methods for Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/GrainCalculationSNPgradesK-12.pdf>

Exhibit A: Grain Requirements for Child Nutrition Programs (USDA):

<https://foodbuyingguide.fns.usda.gov/Content/TablesFBG/ExhibitA.pdf>

Food Buying Guide Exhibit A Grains Tool (USDA):

<https://foodbuyingguide.fns.usda.gov/ExhibitATool/Index>

Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP (CSDE):

<https://portal.ct.gov/-/media/SDE/Nutrition/NSLP/Crediting/GrainsOzEqSNPgradesK-12.pdf>

Ounce Equivalents (Documents/Forms section of the CSDE's Crediting Foods in School Nutrition Programs webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#OunceEquivalents>

Webinar: Exhibit A Grains Tool to the Rescue (USDA):

<https://www.fns.usda.gov/tn/exhibit-grains-tool-rescue>

Webinar: How to Maximize the Exhibit A Grains Tool (USDA):

<https://www.fns.usda.gov/tn/how-maximize-exhibit-grains-tool>

Meal Patterns

Basics at a Glance Portion Control Poster (Institute of Child Nutrition):

<https://theicn.org/icn-resources-a-z/basics-at-a-glance/>

Meal Patterns for Grades K-12 in School Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Meal-Patterns-School-Nutrition-Programs>

Menu Planning for Child Nutrition Programs (CSDE webpage):

<https://portal.ct.gov/SDE/Nutrition/Menu-Planning>

Menu Planning Guide for School Meals for Grades K-12 (CSDE):

<https://portal.ct.gov/SDE/Nutrition/Menu-Planning-Guide-for-School-Meals>

WGR Criteria

Whole Grain-rich Requirement (Documents/Forms section of the CSDE's Crediting Foods in CACFP Adult Day Care Centers webpage):

<https://portal.ct.gov/SDE/Nutrition/Crediting-Foods-in-School-Nutrition-Programs/Documents#WGR>

Whole Grain Resource for the National School Lunch and School Breakfast Programs (USDA):

<https://www.fns.usda.gov/tn/whole-grain-resource-national-school-lunch-and-school-breakfast-programs-0>

Glossary

Administrative Review (AR): The state agency’s comprehensive offsite and onsite evaluation of all SFAs participating in the NSLP and SBP. The review cycle is every three years for each SFA and includes a review of both critical and general areas. For more information, visit the CSDE’s [Administrative Review for School Nutrition Programs](#) webpage.

Afterschool Snack Program (ASP): The USDA’s federally assisted snack program implemented through the National School Lunch Program (NSLP). The ASP provides cash reimbursement to help schools serve snacks to children in afterschool activities aimed at promoting the health and well-being of children and youth. Schools must provide children with regularly scheduled activities in an organized, structured and supervised environment that includes educational or enrichment activities, e.g., mentoring/tutoring programs. Programs must meet state or local licensing requirements and health and safety standards. For more information, visit the CSDE’s [Afterschool Snack Program](#) webpage.

amaranth: A small type of gluten-free pseudo-grain. Amaranth is a whole grain. For more information, refer to “pseudo-grains” in this section.

azodicarbonamide (ADA): A chemical substance approved by the FDA for use as a whitening agent in cereal flour and a dough conditioner in bread baking.

barley: A whole-grain that has a very tough hull. Whole barley and hulled barley are whole grains, but pearled barley is not. For more information, refer to “pearled grains” in this section.

berries (such as wheat berries and rye berries): The whole kernel of grain.

bleached flour: Flour treated with chemical agents to speed up the natural aging process and produce a whiter flour with a finer grain and softer texture. Bleached flour is a creditable grain if it is enriched. For information on crediting enriched grains, refer to the CSDE’s resource, [Crediting Enriched Grains in the NSLP and SBP](#).

bran: The seed husk or outer coating of cereal grains such as wheat, rye, and oats. Examples include oat bran, wheat bran, corn bran, rice bran, and rye bran. Bran is not a whole grain and does not credit in the NSLP and SBP meal patterns for grades K-12. Bran counts toward the limit for noncreditable grains. For more information, refer to “[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)” in section 2.

bleached flour: Flour treated with chemical agents to speed up the natural aging process and produce a whiter flour with a finer grain and softer texture. Bleached flour is a creditable grain if it is

enriched. For information on crediting enriched grains, refer to the CSDE’s resource, [Crediting Enriched Grains in the CACFP](#).

bromated flour: A type of flour with added potassium bromate, which promotes gluten development to improve dough’s baking qualities (such as the rise and elasticity of dough). This flour is more commonly available with ascorbic acid added to provide the elasticity instead of potassium bromate. Bromated flour is a creditable grain if it is enriched. For more information, refer to “unbromated flour” in this section. For information on crediting enriched grains, refer to the CSDE’s resource, [Crediting Enriched Grains in the NSLP and SBP](#).

buckwheat: A type of gluten-free pseudo-grain typically used in foods like pancakes and soba noodles. that is botanically a relative of rhubarb. Buckwheat is a whole grain. For more information, refer to “pseudo-grains” in this section.

bulgur: Precooked parboiled (cracked or steamed) whole-wheat grains.

cereal grains: The seeds that come from grasses. Cereal grains can be whole grain (such as amaranth, barley, buckwheat, corn, millet, oats, quinoa, rice, rolled wheat, rye, sorghum, triticale, wheat, and wheat berries) or enriched (such as enriched cornmeal, corn grits, and farina).

Child Nutrition (CN) label: A statement that clearly identifies the contribution of a food product toward the meal pattern requirements, based on the USDA’s evaluation of the product’s formulation. Products eligible for CN labels include main dish entrees that contribute to the meat/meat alternates component, e.g., beef patties, cheese or meat pizzas, meat or cheese and bean burritos, egg rolls, and breaded fish portions. CN labels usually indicate the contribution of other meal components (such as vegetables, grains, and fruits) that are part of these products. For more information, refer to the CSDE’s resource, [Child Nutrition \(CN\) Labeling Program](#), and visit the USDA’s [Child Nutrition \(CN\) Labeling](#) webpage.

Child Nutrition Programs: The USDA’s federally funded programs that provide nutritious meals and snacks to children, including the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program, Special Milk Program (SMP), Summer Food Service Program (SFSP), Seamless Summer Option (SSO) of the NSLP, Fresh Fruit and Vegetable Program (FFVP), and Child and Adult Care Food Program (CACFP). The CACFP also provides nutritious meals and snacks to the frail elderly in adult day care centers. For more information, visit the CSDE’s [Child Nutrition Programs](#) webpage.

combination foods: Foods that contain more than one food component, such as pizza, burritos, and smoothies made with milk and fruit. For example, macaroni and cheese contains pasta (grains) and cheese (meat/meat alternate). Combination foods generally cannot be separated (such as pizza and burritos), or are not intended to be separated (such as a hamburger on a bun or turkey sandwich).

Connecticut Nutrition Standards: State nutrition standards developed by the Connecticut State Department of Education per Section 10-215e of the Connecticut General Statutes. These standards address the nutritional content of all foods sold to students separately from reimbursable meals. They focus on limiting fat, saturated fats, trans fats, sodium, and added sugars, moderating portion sizes, and increasing consumption of nutrient-rich foods such as fruits, vegetables, whole grains, low-fat dairy, lean meats, and legumes. All schools in any district that chooses to comply with the healthy food option of Healthy Food Certification under Section 10-215f of the Connecticut General Statutes must follow the Connecticut Nutrition Standards for all sources of food sales to students, including school cafeterias, vending machines, school stores, fundraisers, and any other sources. The Connecticut Nutrition Standards also apply to all snacks served in the Afterschool Snack Program. For more information, visit the CSDE’s [Connecticut Nutrition Standards](#) webpage.

corn masa: Dough made from masa harina that is used for making corn products such as tortillas, tortilla chips, and tamales. Corn masa is nixtamalized and credits as a whole grain. For more information, refer to “[Whole grains](#)” in section 1, and the CSDE’s resource, *Crediting Whole Grains in the NSLP and SBP*.

cornmeal: Meal made from ground, dried corn.

couscous: A type of grain product similar to pasta that is made from crushed semolina.

cracked wheat: Whole-wheat grains cut or crushed into smaller pieces.

creditable food: A food or beverage that counts toward meeting the meal pattern requirements for a reimbursable meal or snack in the USDA’s Child Nutrition Programs. For more information, visit the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

creditable grains: The ingredients in a commercial grain product or standardized recipe that credit toward the grains component. For the NSLP and SBP meal patterns for grades K-12, creditable grains include whole grains and enriched grains, e.g., whole-grain flour, whole-grain meal, corn masa, masa harina, hominy, enriched flour, and enriched meal.

DATEM or datem: An abbreviation for “diacetyl tartaric acid ester of mono- and diglycerides,” which is an emulsifier used in baking. DATEM strengthens the gluten network in dough to improve the bread’s texture and shape.

degerminated cornmeal: Cornmeal that has the germ removed to increase shelf life. Degerminated cornmeal is not a whole grain.

Dietary Guidelines for Americans: A federal document that provides science-based advice for Americans ages 2 and older to promote health and reduce risk for chronic diseases through diet and physical activity. The U.S. Department of Health and Human Services and the U.S. Department of Agriculture jointly publish the *Dietary Guidelines* every five years. This document forms the basis of federal food, nutrition education, and information programs. For more information, visit the [Dietary Guidelines for Americans](#) webpage.

endosperm: The soft, white inside portion of the whole-grain kernel. The endosperm contains starch, protein, and small amounts of B vitamins.

enriched grains: Refined grains (such as wheat, rice, and corn) and grain products (such as cereal, pasta, and bread) that have some vitamins and minerals added to replace the nutrients lost during processing. The five enrichment nutrients are added within limits specified by the FDA, and include thiamin (B₁), riboflavin (B₂), niacin (B₃), folic acid, and iron. For more information, refer to “[Enriched grains](#)” in section 1, and the CSDE’s resource, [Crediting Enriched Grains in the NSLP and SBP](#).

enrichment: Adding back nutrients (usually vitamins or minerals) originally present in a food that were lost during processing. Enrichment nutrients are added back in approximately the same levels as were originally present in the food. For more information, refer to “enriched grains” in this section.

Exhibit A chart: A USDA chart that indicates the required weight (groups A-G) or volume (groups H-I) for a grain food to provide 1 ounce equivalent (NSLP and SBP) or 1 serving (ASP) of the grains component. This chart may be used for commercial grain products and for standardized recipes that indicate the weight of the prepared (cooked) serving. The required amounts for the grains component are not the same for all Child Nutrition Programs. The CSDE’s resource, [Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP](#), lists the Exhibit A grain ounce equivalents that apply to grades K-12 in the NSLP and SBP. For more information, refer to the USDA’s [Exhibit A: Grain Requirements for Child Nutrition Programs](#).

flour: Finely ground and sifted wheat or other grains such as rye, corn, rice, or buckwheat.

fortification: Adding nutrients (usually vitamins or minerals) that were not originally present in a food or beverage, or adding nutrients at levels that are higher than originally present. Fortification is used for naturally nutrient-rich products based on scientifically documented health needs (such as fortifying milk with vitamin D to increase the body’s absorption of calcium), or to enhance the perceived nutritional value of products with little or no natural nutritional value, e.g., fortifying “energy” bars made from processed flour with multiple vitamins and minerals. Fortification nutrients are added to products in varying amounts, from small percentages up to amounts greater than recommended intakes.

germ: The vitamin-rich sprouting section of the whole-grain kernel. Germ is not a whole grain. Germ does not credit in the NSLP and SBP meal patterns for grades K-12. It must count toward the limit for noncreditable grains. For more information, refer to “[WGR Criterion 3 – Noncreditable Grains Meet Limit](#)” in section 2.

gluten: The general name for proteins naturally found in certain cereal grains, such as barley, rye, wheat and triticale (a wheat-rye hybrid). Gluten has elastic properties that help dough to stretch, rise, and maintain moisture when heated. It is frequently used as an additive to improve texture and promote moisture retention in processed foods. Gluten is a grain derivative that does not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12. For more information, refer to “grain derivative” in this section and column 2 in [table 2-4](#).

graham flour: A type of coarsely ground whole wheat flour.

grain berries: The unprocessed whole kernel of grain, such as wheat berries and rye berries.

grain derivative: A by-product of grains, such as malt made from barley, wheat gluten made from wheat, and maltodextrin made from corn. Grain derivatives do not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12. For examples of grain derivatives, refer to column 2 in [table 2-4](#).

grains: Plants in the grass family, which produce a dry, edible fruit commonly called a kernel, grain, or berry.

grains component: The meal component of the USDA meal patterns that is comprised of cereal grains and products made from their flours. Grain products and recipes must be WGR to credit as the grains component. For additional guidance on the grains component of the NSLP and SBP meal patterns for grades K-12, refer to the CSDE’s guide, *Menu Planning Guide for School Meals for Grades K-12*, and visit the “[Grains Component for Grades K-12](#)” section of the CSDE’s [Crediting Foods in School Nutrition Programs](#) webpage.

grits: A coarsely ground grain made with hominy or stone-ground corn.

groats: The hulled kernels of various cereal grains, such as oat, wheat, rye, buckwheat, and barley. Groats are whole grains.

Healthy Food Certification: A state statute (Section 10-215f of the Connecticut General Statutes) that requires each board of education or governing authority for all public schools participating in the NSLP to certify annually to the CSDE whether they will follow the Connecticut Nutrition Standards (CNS) for all foods sold to students separately from reimbursable meals. Districts that choose to implement the CNS receive additional funding per lunch, based on the total number of reimbursable lunches (paid, free, and reduced) served in the district in the prior school year. For more information, refer to “Connecticut Nutrition Standards” in this section and visit the CSDE’s [Healthy Food Certification](#) webpage.

hominy grits: A type of grits made from hominy.

hominy: A traditional food in Mexican and Native American cultures that is commonly served as a vegetable or milled grain product, e.g., hominy grits. Hominy is made from whole kernels of maize (dried field corn) that have been soaked in an alkaline solution (nixtamalized). This process removes the hull and germ, causes the corn to puff up to about double its normal size, and increases the bioavailability of certain nutrients, such as calcium and niacin. For more information, refer to “Whole grains” in section 1, and the CSDE’s resource, [Crediting Whole Grains in the NSLP and SBP](#).

instant oatmeal: Oatmeal made from whole-grain oats that are thinner and more finely chopped than rolled oats. Instant oatmeal has a soft texture and cooks quickly.

l-cysteine: An amino acid used in baking to help soften the dough and reduce processing time.

maltodextrin: A carbohydrate derived from starch (typically from corn, potatoes, rice, or wheat) that is used as a food additive to enhance texture and flavor. Maltodextrin is a grain derivative that does not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12. For more information, refer to “grain derivative” in this section and column 2 in [table 2-4](#).

masa harina: Corn flour used for making corn products such as tortillas, tortilla chips, and tamales. Masa harina is nixtamalized and credits as a whole grain. For more information, refer to “Whole grains” in section 1, and the CSDE’s resource, [Crediting Whole Grains in the NSLP and SBP](#).

meal pattern: The required food components and minimum serving sizes that schools and institutions participating in the USDA’s Child Nutrition Programs must provide to receive federal reimbursement for meals and snacks served to children. For information on the NSLP and SBP meal patterns, visit the CSDE’s [Meal Patterns for Grades K-12 in School Nutrition Programs](#) webpage.

meal: A grain made by coarsely grinding corn, oats, wheat, or other grains. Whole grain, enriched, or fortified meal credits toward the grains component of the USDA’s meal patterns.

meals: Refer to “reimbursable meals” in this section.

millet: A group of several small related grains. Millet is a gluten-free whole grain

modified food starch: A chemically altered ingredient made from starch that is used as a thickening agent, stabilizer, or emulsifier. The most common types of modified food starch are made from corn, wheat, potato, and tapioca. Modified food starch is a noncreditable grain that counts toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12. For more information, refer to “[WGR Criterion 3 –Noncreditable Grains Meet Limit](#)” in section 2.

National School Lunch Program (NSLP): The USDA’s federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. The NSLP provides nutritionally balanced, low-cost or free lunches to children each school day. It was established under the National School Lunch Act, signed by President Harry Truman in 1946. For more information, visit the CSDE’s [National School Lunch Program](#) webpage.

nixtamalization: A process in which dried corn is soaked and cooked in an alkaline (slaked lime) solution. This process increases the bioavailability of certain nutrients and provides a nutritional profile similar to whole-grain corn. Nixtamalized corn is used to make hominy, masa harina (corn flour), corn masa (dough from masa harina), and certain types of cornmeal. Nixtamalized corn credits as a whole grain. For more information, refer to “[Whole grains](#)” in section 1, and the CSDE’s resource, [Crediting Whole Grains in the NSLP and SBP](#).

noncreditable grains: Grain ingredients that do not contribute to the grains component. Examples include fiber, bran, germ, and modified food starch (including potato, legume, and other vegetable flours). For more information, refer to “[WGR Criterion 3 –Noncreditable Grains Meet Limit](#)” in section 2.

old-fashioned oats (rolled oats): Whole-grain oats that have been steamed and flattened. They have a firm texture and cook faster than steel-cut oats.

ounce equivalent: A unit of measure that indicates the contribution of a given serving size toward the grains component of the NSLP and the SBP meal patterns for grades K-12. One ounce equivalent provides 16 grams of credible grains. The amount of a grain food that provides 1 ounce equivalent varies because different types of foods contain different amounts of creditable grains. For example, 1 ounce equivalent of the grains component can be less than a measured ounce (e.g., pretzels, bread sticks, and crackers), equal to a measured ounce (e.g., bagels, biscuits, bread, rolls, cereal grains, and RTE breakfast cereals), or more than a measured ounce (e.g., muffins, pancakes, and grain-based desserts such as cookies, cake, and granola bars). For more information, refer to the CSDE’s resource, [Grain Ounce Equivalents for Grades K-12 in the NSLP and SBP](#).

pearled grains: Removing the bran from the whole grain, such as pearled barley. Pearled grains are not whole grains.

primary grain ingredient: The greatest grain ingredient by weight. For commercial grain foods, this is the first ingredient (excluding water) listed in the product’s ingredients statement. For commercial combination foods that contain a grain portion, this is the first grain ingredient (excluding water) listed in the product’s ingredients statement. For commercial combination foods that contain a grain portion listed separately, this is the first ingredient (excluding water) listed in the grain portion of the product’s ingredients statement.

product fact sheet: Refer to “product specification sheet” in this section.

product formulation statement (PFS): An information statement obtained from the manufacturer that provides specific information about how a product credits toward the USDA’s meal pattern requirements, and documents how this information is obtained citing Child Nutrition Program resources or regulations. All creditable ingredients in this statement must match a description in the USDA’s *Food Buying Guide for Child Nutrition Programs*. The PFS must be prepared on company letterhead with the signature of a company official and the date of issue. Unlike a CN label, a PFS does not provide any warranty against audit claims. SFAs must check the manufacturer’s crediting information for accuracy prior to including the product in reimbursable meals. For more information, refer to [Evaluating PFS Forms for Grain Products](#) in section 3, and the CSDE’s resources, *Product Formulation Statements* and *Accepting Processed Product Documentation*.

product specification sheet: Manufacturer sales literature that provides various information about the company’s products. These materials do not provide the specific crediting information that is required on a product formulation statement and cannot be used to determine a product’s contribution toward the USDA’s meal pattern components.

pseudo-grains: Plants that are not in the same botanical family as cereal grains, but have nutritional profiles and uses similar to “true” cereal grains. Examples include amaranth, quinoa and buckwheat.

quinoa: A small, round type of pseudo-grain that is botanically a relative of Swiss chard and beets. Quinoa is a whole grain. For more information, refer to “pseudo-grains” in this section.

refined grains: Grains that have been processed to remove the bran and germ, making the product less nutritious than whole grains. Refined grains may or may not be enriched. For more information, refer to “enriched grains” in this section.

reimbursable meals: Meals and ASP snacks that meet the meal pattern requirements of the USDA’s regulations for Child Nutrition Programs.

residential child care institution (RCCI): RCCIs include, but are not limited to homes for the mentally, emotionally or physically impaired, and unmarried mothers and their infants; group homes; halfway houses; orphanages; temporary shelters for abused children and for runaway children; long-term care facilities for chronically ill children; and juvenile detention centers. A long-term care facility is a hospital, skilled nursing facility, intermediate care facility, or distinct part thereof, which is intended for the care of children confined for 30 days or more.

School Breakfast Program (SBP): The USDA’s federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. The SBP provides nutritionally balanced, low-cost or free breakfasts to children each school day. The program was established under the Child Nutrition Act of 1966 to ensure that all children have access to a healthy breakfast at school to promote learning readiness and healthy eating behaviors. For more information, visit the CSDE’s [School Breakfast Program](#) webpage.

school food authority (SFA): The governing body that is responsible for the administration of one or more schools and has the legal authority to operate the USDA’s school nutrition programs.

school nutrition programs: The USDA’s school nutrition programs include the National School Lunch Program (NSLP), School Breakfast Program (SBP), Afterschool Snack Program (ASP) of the NSLP, Seamless Summer Option (SSO) of the NSLP, Special Milk Program (SMP), Fresh Fruit and Vegetable Program (FFVP), and Child and Adult Care Food Program (CACFP) At-risk Supper Program implemented in schools. For more information, visit the CSDE’s [School Nutrition Programs](#) webpage.

Seamless Summer Option of the NSLP (SSO): The USDA’s federally assisted summer feeding program that combines features of the NSLP, SBP, and SFSP, and serves meals free of charge to children ages 18 and younger from low-income areas. School districts participating in the NSLP or SBP are eligible to apply to the CSDE to participate in the SSO. SSO meals follow the meal patterns of the NSLP and SBP. For more information, visit the [Seamless Summer Option of the NSLP](#) webpage.

semolina: A type of meal made from coarsely ground hard wheat (e.g., durum) used in puddings and pasta. Semolina is not a whole grain.

serving size or portion: The weight, measure, number of pieces, or slices of a food or beverage. For meals to be reimbursable, SFAs must provide the minimum servings specified in the USDA’s meal patterns.

soy lecithin: A substance made from soy oil that is used as an emulsifier or stabilizer in food.

standard of identity: The mandatory government requirements that determine what a food product (like whole-wheat bread) must contain or may contain to be marketed under a certain name in interstate commerce. These standards protect consumers by ensuring that a label accurately reflects what is inside. For example, mayonnaise is not an imitation spread, and ice cream is not a similar, but different, frozen dessert. The USDA develops standards for meat and poultry products. The FDA develops standards for other food products.

standardized recipe: A recipe that a given food service operation has tested and adapted for use. This recipe produces the same good results and yield every time when the exact procedures are used with the same type of equipment, and the same quantity and quality of ingredients. Standardized recipes include specific information such as ingredients, weights and measures, preparation directions, serving directions, yield, and portion size. For information on standardized recipes, visit the “[Crediting Foods Prepared on Site in School Nutrition Programs](#)” section of the CSDE’s [school Crediting Foods in School Nutrition Programs](#) webpage.

steel-cut oats: Whole-grain oats that are chopped into small pieces. Steel-cut oats have a chewier texture than rolled oats and instant oats, and take the longest to cook.

triticale: A hybrid of durum wheat and rye. Triticale is a whole grain.

unbleached flour: Flour that has aged naturally after being milled. Unbleached flour has an off-white color and a denser grain than bleached flour. It provides more structure in baked goods due to its denser texture. Unbleached flour is a creditable grain if it is enriched. For information on crediting enriched grains, refer to the CSDE’s resource, [Crediting Enriched Grains in the NSLP and SBP](#).

unbromated flour: A baking flour that is higher in protein and does not contain potassium bromate. Unbromated flour develops more gluten, which results in a more stable baked product. It is commonly used for baking at high altitudes. Unbromated flour is a creditable grain if it is enriched. For information on crediting enriched grains, refer to the CSDE’s resource, [Crediting Enriched Grains in the NSLP and SBP](#).

vital wheat gluten: A powdered form of wheat gluten that is used in baking to add elasticity to flours that are low in gluten, such as whole wheat or rye. Vital wheat gluten is a grain derivative that does not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12. For more information, refer to “grain derivative” in this section and column 2 in [table 2-4](#).

wheat bread: Bread that often has wheat flour or enriched wheat flour (not whole-wheat flour) as an ingredient. Wheat bread is not whole grain unless it is labeled “whole-wheat bread.” Wheat bread is low in fiber unless the manufacturer has added fiber.

wheat gluten: The protein component of the wheat grain that helps baked goods hold their shape. Wheat gluten is a grain derivative that does not count toward the noncreditable grains limit for WGR foods in the NSLP and SBP meal patterns for grades K-12. For more information, refer to “gluten” and “grain derivative” in this section and column 2 in [table 2-4](#).

whey: A milk protein used to emulsify, thicken, and brown baked goods.

whole grain-rich (WGR): For the NSLP and SBP meal patterns for grades K-12, whole grain-rich foods must contain at least 50 percent whole grains, any other grain ingredients must be enriched, and any noncreditable grains must be less than two percent ($\frac{1}{4}$ ounce equivalent) of the product formula. For more information, refer to section 2.

whole grains: Grains that consist of the entire kernel, including the starchy endosperm, the fiber-rich bran, and the nutrient-rich germ. All grains start out as whole grains, but many are processed to remove the bran and germ, which also removes many of the nutrients. Whole grains are nutrient rich, containing vitamins, minerals, fiber, antioxidants, and health-enhancing phytonutrients such as lignans and flavonoids. Examples of whole grains include whole wheat, whole oats, oatmeal, whole-grain cornmeal, brown rice, whole rye, whole barley, wild rice, buckwheat, and bulgur (cracked wheat). For more information, refer to “[Whole grains](#)” in section 1, and the CSDE’s resource, *Crediting Whole Grains in the NSLP and SBP*.

whole-grain flour: Flour made by grinding the entire whole-grain kernel, including the fiber-rich bran, nutrient-rich germ, and starchy endosperm. Flour or meal that does not contain all parts of the grain is not whole grain, e.g., degermed corn, milled rice, and wheat flour. For more information, refer to “[Whole grains](#)” in section 1, and the CSDE’s resource, *Crediting Whole Grains in the NSLP and SBP*.

whole-wheat bread: Bread that contains the whole grain, including the starchy endosperm, the fiber-rich bran, and the nutrient-rich germ. Whole-wheat flour will be listed as the first grain ingredient.



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